



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

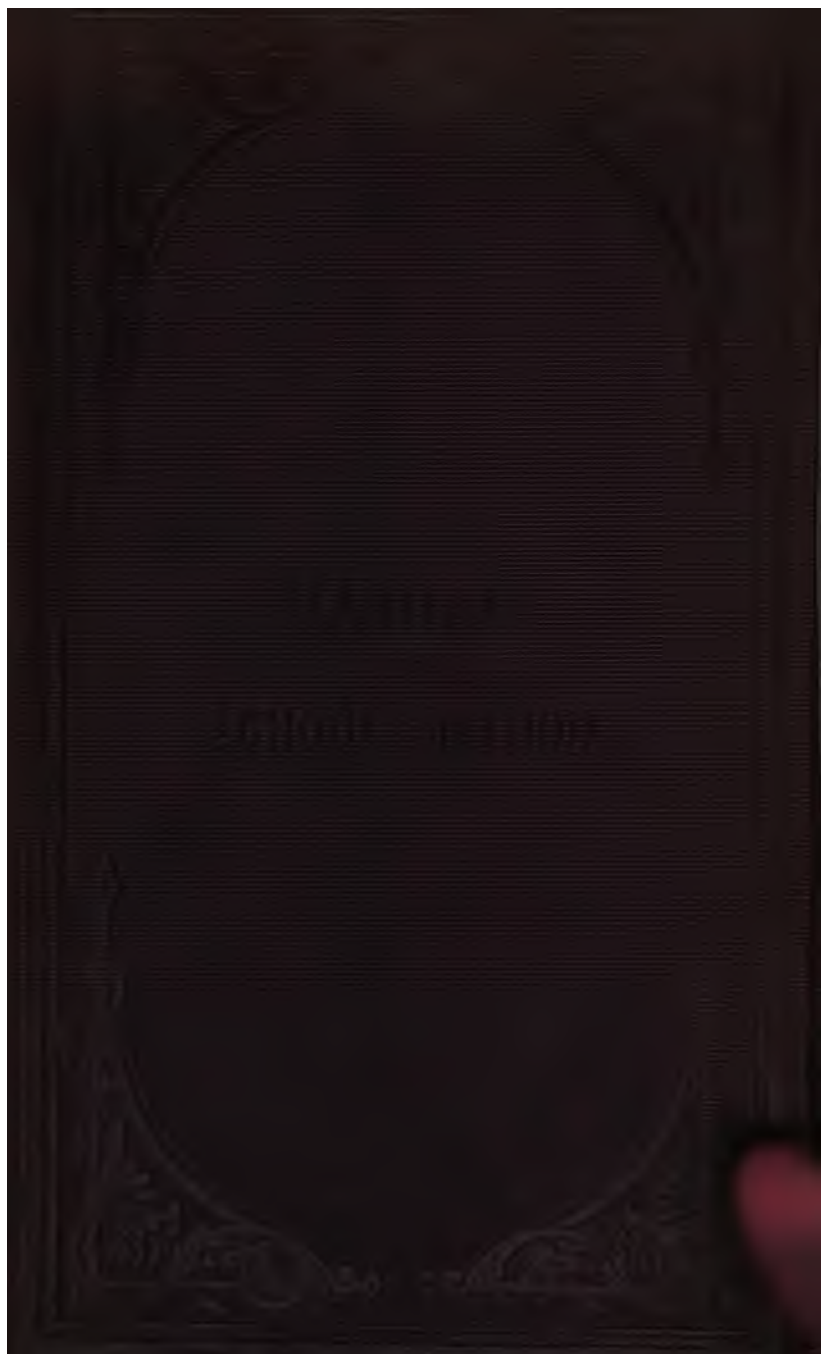
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>





600058826Z





600058826Z







# MANUAL OF METHOD;

FOR THE USE OF

## TEACHERS

IN

### ELEMENTARY SCHOOLS.

By W. F. RICHARDS,

HEAD MASTER OF THE NATIONAL SOCIETY'S CENTRAL SCHOOL,  
WESTMINSTER.

LONDON:

NATIONAL SOCIETY'S DEPOSITORY,  
SANCTUARY, WESTMINSTER.

1854.

260. g. 210.



---

LONDON: PRINTED BY WILLIAM CLOWES AND SONS, STAMFORD STREET,  
AND CHARING-CROSS.

## P R E F A C E.

---

AN attempt has been made in the following pages to explain shortly some of the most important points connected with the methods of teaching and organization in Elementary Schools. The numerous communications addressed to the writer, and to others connected with the National Society, are a sufficient proof that the want of such a book is much felt, and must serve as an excuse for the attempt.

It is necessary to observe that those teachers who have had the benefit of a systematic course of training, including regular attendance in a Model and a Practising School, can scarcely stand in need of the assistance which the following pages are intended to afford, and which is designed principally for the use of those masters and mistresses whose opportunities of improvement have been scanty. It is however hoped that even to the best trained and most experienced teacher the hints here given may not be unacceptable, even if they only serve to remind him of points of practice which may have escaped his memory from want of immediate application.

With regard to the book itself the writer has to remark that the specimens given of notes of lessons are such as will be found available only for upper classes. A greater

variety, graduated for children of different ages and attainments, might easily have been given ; but this would have interfered with the main object in view, viz., the production, *in the most concise form possible*, of a book embracing all those topics upon which information is likely to be required by the less experienced Teacher.

In conclusion, it has been the author's aim to make the book throughout of a *practical* character. Some of the terms lately come into vogue on the subject of education, *e. g.* "the philosophy of teaching," do not, he frankly admits, convey to his mind any very definite idea.

*January, 1854.*

# TABLE OF CONTENTS.

## CHAPTER I.—SCHOOL ORGANIZATION.

Buildings—Desks, Forms, &c.—Books for Teachers—Class-Books for Children—Monitors—Pupil-Teachers—Classification and Time-Tables—Rules of Admission, &c. - - - Pages 1-21

## CHAPTER II.—ON SCHOOL DISCIPLINE.

Regular and Punctual Attendance—Drilling—Reverence and Attention in Religious Exercises—Respect to Superiors—Emulation, Rewards, Prizes, &c.—Punishments - - - 21-31

## CHAPTER III.—ON THE QUALIFICATIONS AND DUTIES OF THE TEACHER.

Moral and Religious—Previous Training—Necessary Attainments 31-36

## CHAPTER IV.—ON TEACHING.

Methods of Teaching—The Individual—Mutual—Simultaneous—Synthetical—Analytical—Catechetical.—Home Lessons and Work—Previous Preparation of Lessons by the Teacher—Apparatus for Teaching - - - - - 36-47

## CHAPTER V.—ON RELIGIOUS INSTRUCTION.

Holy Scripture—Church Catechism—Liturgy—Scheme of Religious Instruction for successive Classes—Notes of Lessons - 47-63

## CHAPTER VI.—ON READING, SPELLING, GRAMMAR, AND ETYMOLOGY.

Common defects in Reading with respect to the Pronunciation of *Letters* and *Words*—Wrong Emphasis, &c.—Mode of Teaching the Alphabet in Infant Schools—Spelling and Dictation—Etymology—Grammar—Lessons on Grammar—Analysis of a sentence - - - - - 63-81

## CHAPTER VII.—ON TEACHING WRITING.

Pages 82-84

## CHAPTER VIII.—ON TEACHING ARITHMETIC.

Counting—On the Principles of Number—Addition—Subtraction—  
 Multiplication—Division—Fractional Arithmetic—Mental Arith-  
 metic—Lesson on the Rule of Three - - - 84-106

## CHAPTER IX.—ON TEACHING GEOGRAPHY.

Mathematical—Physical—Political—Preparatory Lessons on Geo-  
 graphy—Remarks by Mr. Sullivan and Mr. Hughes—On the  
 Arrangement of Notes for Lessons on Geography—Notes on the  
 Geography of England - - - 106-115

CHAPTER X.—ON HISTORY, NATURAL PHILOSOPHY, DRAWING,  
AND VOCAL MUSIC.

Arrangement of periods in History—Lesson on the Reign of Queen  
 Anne—Subjects for Lessons on Natural Philosophy—Government  
 Scheme for the Establishment of Drawing Classes—Mr. Hullah's  
 System of Vocal Music - - - 115-120

## CHAPTER XI.—ON EVENING SCHOOLS.

London Diocesan Board of Education and Committee of Council on  
 Evening Schools—Subjects of Instruction and Time-Table—Charge  
 for Admission - - - 120-125

## APPENDICES.

(A.) School Plans - - - - -	127-133
(B.) Routine of Instruction for Pupil Teachers - - -	134-135
(C.) Time-Tables for the use of Schools - - -	136-141

A

# MANUAL OF METHOD

FOR

## THE USE OF TEACHERS.

---

---

### CHAPTER I.

#### SCHOOL ORGANIZATION.

I. SCHOOL organization, in the fullest sense of the term, includes everything which has reference both to the construction of a building suitable for educational purposes and to the internal arrangements necessary for carrying on the business of instruction. On the first of these subjects—viz. the plans and the erection of school-buildings—it does not appear necessary to enter at any length here, because such matters are generally left in the hands of an architect, and local circumstances often render it desirable to adhere to some particular style and dimensions. The following points, however, are briefly stated as worthy of notice.

Convenience should never be sacrificed to external appearance. School-buildings must be constructed according to those plans which are found best adapted for the methods of instruction which are to be pursued. But, whatever the shape or size of the building may be, particular care should be taken to afford the best possible means of ventilation. To secure this object, as well as for other good reasons, the windows should be placed either in the roof or at a distance of at least six feet from the ground. The structure of the roof also deserves careful attention;

as, by a judicious arrangement of rafters, cross-pieces, &c., much may be done to obviate the bad effects of reverberation and the echo of the children's voices. It seems almost needless to add that, if possible, a play-ground should be attached to the schools, in which the children may amuse themselves at stated times in the day with games and gymnastic exercises.

The situation of the school premises should be cheerful, and as far as possible removed from any noisy and unhealthy neighbourhood. Class-rooms, closets, and all other necessary offices should be liberally provided.

If the room be built to accommodate a mixed assemblage of boys and girls, arrangements must be made whereby it may be divided when requisite. A framed partition may be put up for this purpose, either removable altogether, or made to slide in a groove to the side of the room. The superficial area or space allowed for each child of the gross total number on the register should, on no account, be less than *seven square feet*. If the room be not very lofty this allowance can scarcely be considered sufficient.

On the subject of school-buildings much valuable information may be obtained from the Reports of the National Society, and from the Minutes of the Committee of Council, especially those for the years 1839 and 1840, though the requirements of the Committee of Council on Education with respect to school-buildings at the present time are much more stringent than those enforced a few years back. A very practical work, by the Rev. Charles Richson, entitled the '*School-builder's Guide*,' has been published by Darton and Co., and may be obtained at the National Society's Depository.

## II. *On the Internal Organization of National Schools.*

—Much of the success of a teacher's labours will depend upon the manner in which the school-room is furnished

with forms, desks, books, and the other appliances necessary for facilitating the instruction of the children.

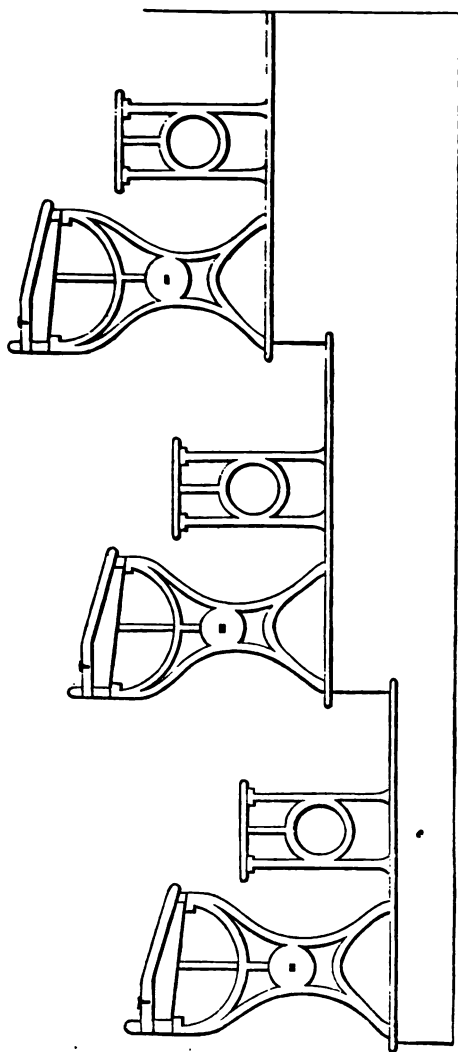
1. *Desks, Forms, &c.*—The old plan of fixing desks round the school-room, so that the boys might sit with their faces to the walls, is now very properly giving place to the more convenient arrangement of grouping them in parallel lines on raised planes, each successive desk rising a few inches above the preceding, as in the woodcut at page 4.

It is strongly recommended by many practical educationists of the present day that the children should be seated at such groups of parallel desks to receive *all* their lessons, instead of being occasionally arranged in squares or semi-circles on the floor; but this organization appears to possess some disadvantages. For although most subjects may be taught with advantage in desks, there are also many which may be taught equally well out of them; and as change of position during three hours' school-time is almost necessary for children, it seems undesirable to confine them in one place and posture. It has been observed that the plan allows them "breathing space, elbow-room, independence of attitude," &c.; but at the same time it sacrifices variety of position, already referred to, the emulation of taking places, and other advantages.

In many lessons, as, for example, *reading*, it seems desirable that what is read by each boy should be distinctly heard by the whole class; but this can scarcely be attained if the boys are seated in parallel desks. The back row will find it difficult to hear what is read in the front, and *vice versâ*, unless the boys be encouraged to speak in a louder tone of voice than may be found convenient for adjoining classes.

In the opinion of the writer, it would require a teacher of more than ordinary tact and skill to prevent a system which allows so much freedom from restraint from degenerating into one of listlessness and inattention. Un-





*Section of Boyd' Writing-Desks.*

doubtedly, however, the children may with great advantage receive a large portion of their lessons in parallel desks, and the particular subjects which are recommended for such instruction are the following:—

Writing on paper or slates.	Explanation of the principles of arithmetic. Vocal Music.
Drawing.	
Dictation.	
Lectures on familiar subjects.	

Class squares and semicircles appear best adapted to those lessons which require that the children should come out individually to have their work inspected by the teacher, as in the practice of arithmetic, or to point out places in maps, globes, &c.

In Appendix A will be found a series of plans of school and class rooms, with a description of the arrangements ordinarily in use for fitting them with desks, &c.

2. *Books*.—The books necessary for a school may be divided into two classes: first, those for the special and exclusive use of the teacher; second, those which are to be used by the children.

With regard to the first class, it would be extremely difficult to recommend one particular book out of the many educational works which are now before the public as the best on each subject. The following list of books, selected chiefly from the National Society's catalogue, may, however, assist teachers in the selection of suitable manuals of National School instruction.\*

Teachers' books for religious instruction:—

Catechetical Series.

Questions on the Orders for Morning and Evening Prayer  
(stitched and interleaved).

Questions on Patriarchal History.

Nicholl's Help to Reading the Bible.

---

\* The religious books are selected from the catalogues of the National Society, and the Society for Promoting Christian Knowledge.

Burton's History of the Christian Church.  
 Trowers' (Bp.) Exposition of the Epistles.  
 " " " " Gospels.  
 " " Similitudes used in Scripture.  
 Welchman on the Thirty-nine Articles.  
 Nelson on the Festivals of the Church.  
 Bailey on the Liturgy compared with the Bible.  
 James's Commentary on the Collects.  
 Historical Accompaniment to the Holy Scriptures.

Teachers' books for secular instruction and private reading:—

Hunter's Arithmetic.  
 Colenso's Arithmetic.  
 " Algebra.  
 Tate's First Principles of Arithmetic.  
 Griffin's Mensuration.  
 Fowler's Mechanics.  
 Hind's Trigonometry.  
 Potts' Euclid.  
 Hunter's Grammar.  
 " Derivation.  
 Hughes's British Geography.  
 " European Geography.  
 M'Leod's Geography of Palestine.  
 Historical Series—England, Rome, &c.  
 Dawes' Hints on Secular Instruction.  
 Hullah's Manual of Singing.

3. *Class-Books for Children.*—In selecting books for the use of the classes care must be taken to provide such as will best suit the various capacities of the children. Many valuable series of books have been compiled on the subjects taught in National Schools. Reading-books have of course received the greatest share of attention, because most other subjects are, to a great extent, taught orally by the master. A graduated series of reading-books may be found on the lists of the National Society, the Society for Promoting Christian Knowledge, and the Irish Board of Education;

and various publishers have put forward reading-books which more or less deserve the attention of school managers.

The following list of books for each class is given by way of suggestion to those who may desire some advice on this subject; but there is not the slightest intention to disparage the many other excellent elementary school-books which have lately been published. The list does not include the titles of any particular reading-books, as much difference of opinion exists as to the merits of the various series at present in use.

#### LIST OF BOOKS, &c., FOR A SCHOOL OF SIX CLASSES.

##### *First Class.*

Holy Bible.	Poetry for Schools.
Book of Common Prayer.	*The British Colonies, 1d.
*Texts illustrating the Church Catechism. 1d.	(N. S.)
Hunter's Manual of Arithmetic	*Geography of England and Wales. (N. S.)
Griffin's Examples of Arithmetic.	*Wilson's Grammar. (N. S.)
Griffin's Mensuration.	* „ Etymology. (N. S.)
Mental Arithmetic.	* „ Tables. (N. S.)
*Secular Reading-book; e.g. History of England.	Unframed slates, 9½ in. × 7 in. (N. S.)
	Graduated copy-books.

##### *Second Class.*

New Testament.	Secular Reading-book.
Book of Common Prayer.	Hunter's Manual of Arithmetic.
*Texts illustrating the Church Catechism. 1d.	Griffin's Examples of Arithmetic.
*Wilson's Grammar. 1d.	Unframed slates, 8 in. × 6 in.
* „ Etymology. 1d.	Graduated series of copy-books.
* „ Tables. 1d.	
*Songs for Schools, 1d.	

##### *Third Class.*

New Testament.	*Songs or Hymns.
*Texts. 1d.	Hunter's Manual of Arith.
*Wilson's Grammar.	Griffin's Examples of Arith.
* „ Tables.	Unframed slates, 8 in. × 6 in.
Secular Reading-book.	Graduated copy-books.

*Fourth Class.*

New Testament.	Secular Reading-book.
*Texts. 1d.	Hunter's Manual of Arith.
*Wilson's Grammar.	Unframed slates, 7 in. $\times$ 5 in.
* „ Tables.	Graduated copy-books.

*Fifth Class.*

Discourses, Miracles, &c., of our Blessed Saviour.	Griffin's Examples of Arith- metic.
Secular Reading-book.	Unframed slates, 7 in. $\times$ 5 in.

*Sixth Class.*

Secular Reading-book	Unframed slates, 7 in. $\times$ 5 in.
Griffin's Examples of Arith.	

The books marked thus (\*) should be purchased by the children themselves, as lesson-books.

4. *School Apparatus.*—Every class should be provided with a box, fitted with lock and key, in which should be kept the books, slates, &c., used by the children.

Black boards or large framed slates are now very generally used for the purposes of demonstration. Easels, maps, and other apparatus comprised in the following list, are also considered necessary for the proper working of the school.

*List of Apparatus, &c., for general use.*

Map of the World.	Earthenware inkwells.
„ Europe.	String for slates.
„ England.	Prepared chalk.
„ Palestine.	Admission-book.
„ Travels of St. Paul.	Class register-books.
Large framed slates or black boards, in stands or with easels.	Attendance and absence re- gister.
Slate pencils.	Framed register slates.
Pen-holders and Pencil-holders.	Suspension tickets.
Terrestrial globe.	Visitors' book, &c. &c.

In the lists given above, only those books and apparatus have been set down which appear to be absolutely essential

for carrying out the best systems of instruction. Those who wish for a greater choice of school books and materials are recommended to consult the catalogue of the National Society, which may be had on application to the superintendent of the National Society's depository, Sanctuary, Westminster.

III. *On other Points of Organization.*— Besides the articles of furniture, as desks, forms, &c., and the books, apparatus, &c., already enumerated, the master will require monitors, either apprenticed or selected from among the most advanced scholars, to assist him in the management and teaching of the children. Every school must have a set of rules for the admission and attendance of the children, and for the guidance of parents. There must also be a system of classification, and time-tables to regulate the duration of lessons.

1. *On Monitors.*— The monitorial system, since its introduction by Dr. Bell, although confessedly one without which no single master, unassisted by paid teachers, could possibly superintend the instruction of a large number of children, has met with considerable opposition. Objections have been made to it, and certainly not without reason, on account of its tendency to create noise and confusion in the school-room; to encourage a superficial and inaccurate standard of attainments among the scholars; to prevent the master from coming into individual contact with his pupils; and to bring into use a class of teachers who, from the temporary and unremunerative nature of their office, can scarcely be expected to feel much interest in the progress of the children.

Since the introduction of the Government scheme of pupil-teachers and stipendiary monitors, the defects referred to in the foregoing objections have, to a great extent, been remedied. But as there yet remain a considerable number

of schools in which from various circumstances it is found necessary to adhere to the old monitorial system in all its main features, it is presumed that a few hints on the selection and management of monitors may not be unacceptable to those masters who still stand in need of the assistance of such officers.

It will always of course be desirable to choose monitors from among the most advanced boys, although it does not necessarily happen that those whose attainments are highest make the best teachers. There is a certain aptitude for teaching which is a qualification as important in the youthful monitor as in the adult instructor. "Due pains," says an eminent writer on school matters, "must be taken in determining the class to which each monitor respectively is to be placed. One monitor will do much better for one class and another for another. It will by no means do to assign the lowest class to the lowest monitor, and so progressively. In truth the younger classes generally require more patience, more perseverance, and, in a word, more teaching qualifications on the part of the monitors than most of the others. The master, it is therefore obvious, ought carefully to avoid laying down, or at least divulging, any general rules, on the subject either of the nomination or the appointment of his monitors. It should be distinctly understood through the school, that in every such nomination *all* circumstances must be taken into account—that one may be rejected or removed from being a *monitor*, merely on account of his not possessing a turn for teaching, without calling in question either his own other attainments or his diligence, and that, among the monitors themselves, the post of honour depends, not on the numerical order of the class intrusted to them, but entirely upon its state of discipline and improvement."

At first the monitor should be employed in the mechanical parts of instruction only; as the hearing of tasks pre-

viously prepared. Each monitor should be provided with an assistant, to whom should be assigned the charge of the books, slates, &c., belonging to the class, and the duty of superintending the order and attention of the children, while the monitor himself is engaged in teaching. He might also be required to make up the registers of attendance of his own particular class. One monitor must be selected for the office of *usher*; his duties will be explained in a succeeding chapter under the head of "Discipline."

Considerable prejudice generally exists in the minds of parents in reference to the monitorial system. They imagine that while their children are employed in teaching their schoolfellows they cannot possibly be acquiring any new information themselves. To counteract, as much as possible, the unpopularity to which the system is thus subject, the master might select two sets of monitors, and employ them alternately, so that one set might at all times be receiving the ordinary instruction of the school. Besides this, he ought to devote an hour beyond the usual school-hours to their instruction, and also give them special lessons for preparation at home. If the funds of the school are sufficient, a small pecuniary reward may be allowed to those monitors who have performed their duties efficiently, or at least the ordinary school fee may be remitted.

2. *Pupil-teachers, &c.*—In the previous section it was remarked that the Committee of Council had endeavoured to remedy the defects of the monitorial system by calling into use a new officer under the name of *pupil-teacher*. The plan, however, was not entirely originated by that body. The National Society and the London Diocesan Board of Education had both previously turned their attention to the appointment of a similar class of assistant teachers for schools. In the report of the National Society for the year 1844 occur the following remarks:—



“ In addition to the ordinary operations of this school (the National Society Central School), a number of well-recommended youths have been admitted, during the last year, as *paid monitors, with a view to their becoming assistant teachers, and eventually masters of schools.* The instruction given them by Mr. Wilson, after school-hours as well as in school, is purely a preparation for usefulness. Their training is essentially practical, and the acquisition and application of knowledge go on almost simultaneously. They thus insensibly gain a power of reproducing, and a habit and love of communicating what they know, which eminently fit them for their future laborious duties.”

To those who are acquainted with the Government scheme, the above quotation must have the appearance of almost an exact description of its objects and intentions. It remained, however, for the Committee of Council both to extend the plan throughout the country at large, and also to place it upon a secure and permanent basis. This has been done by a system of apprenticeship, by which boys and girls are bound to serve under a duly-qualified teacher, for the space of five years, after which they are removed to some accredited training institution.

The minute which decided the appointment of pupil-teachers and stipendiary monitors, with the regulations consequent thereupon, are to be found in the reports of the Committee of Council for the year 1846. As these regulations are also embodied in what is called “*the Broad sheet for pupil teachers,*” a copy of which it is presumed may be obtained on application to the Secretary of the Committee of Council on Education, it appears needless to insert them here. Neither is it necessary to enter at much length upon any subject connected with pupil-teachers, as the published regulations define with very great exactness almost every point upon which information can be derived. As for example:—

---

*The Qualifications requisite for Admission.*

*The Subjects of Instruction.*

*The Qualifications required at the Yearly Examination of the Inspector.*

Provision is made for one hour and a half's instruction per day, by the master, during the five school-days of the week. But with this limited allowance of time, which, however, is as much as can well be afforded in addition to the six hours of regular school-work required from the master, it is manifest that much of the pupil-teacher's success in arriving at the standard of attainments laid down by the Committee of Council must depend upon his own application during the hours of private study. It would be very desirable if any arrangement could be made whereby the pupil-teacher might reside with the master, so that his moral and intellectual training might receive a more constant and regular supervision and direction; but this, under existing circumstances, is rarely possible. The gratuity, or amount of remuneration, allowed by the government, is not sufficient to cover the expenses of board and lodging. For these the pupil-teacher is obliged to depend upon his friends, and thus, in most cases, residence with his parents is a matter almost of necessity. The same cause operates also against the selection of lads who are strangers to the school and neighbourhood, and thus many very eligible candidates, who might otherwise be disposed to offer themselves as pupil-teachers, are excluded.

Great care should be taken in the selection of pupil-teachers. They should not be chosen merely for their superior intelligence and sharpness, though it must be remembered that a child of slow intellect is not likely to prove a successful teacher. Those children will make the best return for the time and labour bestowed on them, who have had the blessing of religious parents, and a well-ordered home, where the efforts of the teacher to impress

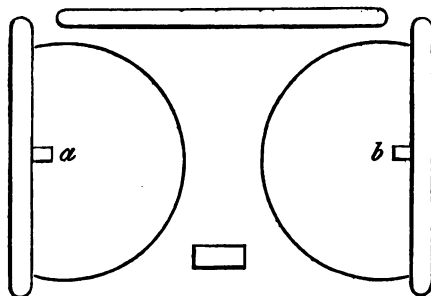
on them the importance of their future calling will be duly seconded,—who have good, sound abilities, rather than precocious sharpness, and who have shown from their earliest years a love of teaching, and an orderly, methodical, frame of mind. As the pupil-teacher advances in his apprenticeship, it will be the especial duty of those set over him to check the very first symptoms of self-sufficiency and conceit—faults not unlikely to be fostered by the position in which he is placed—and to make him feel that his stock of knowledge must be at the best but slight and superficial.

There can, however, be no doubt that the pupil-teacher system has contributed in a great degree to the efficiency of national schools, and its universal application is a matter much to be desired.

In the Appendix B will be inserted a time-table, suggesting a routine of instruction for pupil-teachers in each year of their apprenticeship, which may possibly prove useful to those not experienced in the subject.

3. *On Classification and Time Tables.*—On the subject of *Classification* some difference of opinion exists. The followers of Dr. Bell contend for large classes, containing not fewer than 36. On the other hand, the disciples of Lancaster maintain that the number in one class should never exceed 9. Between these opinions a middle line may be drawn, and it is therefore recommended that an ordinary class should contain about 20 to 24 children. A larger number would probably become unmanageable under a pupil-teacher or monitor, unless with very long experience, while a much smaller number would lead to such a multiplication of classes as to make it almost impossible for the master to provide anything like an efficient staff of assistants, to say nothing of the increased noise which would be occasioned by the additional number of voices.

It would be very desirable if a distinct classification could be made in every branch of study—a particular set of classes for reading, another for arithmetic, another for geography, &c. But this is generally found difficult to accomplish. It is of course next to impossible to find in any school many boys of exactly the same attainments in all subjects, or even possessing the same degree of aptitude in all the different departments of learning; but it is nevertheless comparatively easy to find, in a large school, *twenty* children, sufficiently near to each other in their general acquirements to derive a common benefit from any of the teacher's lessons. In some schools, however, the classes are often subdivided in the practice of arithmetic, and in other silent lessons, the lower divisions being placed under the instruction of the assistants of the classes, and the children being grouped as below.



a. Pupil-teacher's place.

b. Assistant's place.

Closely allied to the subject of Classification is that of *Time-tables*. A class having been formed, it is absolutely essential that some scheme should be drawn up for the guidance of the teacher as to the order and duration of his lessons. The drawing up of such a scheme in a tabulated form is called "constructing a Time-table;" and the

successful working of a school will very much depend upon the judicious arrangement of the subjects of instruction, and the regularity with which the plans laid down are carried out. In large schools it is particularly important that some classes should always be engaged in lessons which can be performed in comparative silence, to prevent undue noise and confusion in the room. It is also advisable that the length of any lesson should not be such as to weary those who are engaged in it, and due regard ought to be paid to the comfort of the children by allowing them every variety of posture which is consistent with the general discipline of the school. The daily scheme of instruction should also provide for specific lessons being given by the master. It is a common fault in schools for the master to think his only duty is that of general superintendence; and beyond a few minutes' occasional teaching as he passes from class to class, his own personal instruction is often considered almost unnecessary. The order of the school should be chiefly in the hands of a well-trained pupil-teacher or monitor, allowing the master to devote most of his time to actual teaching. No day should pass without his giving at least *four* entire lessons, chiefly to the upper classes.

Time-tables, a selection from which will be found in the Appendix, have been recently published at the National Society's Depository. They are intended as models generally applicable to schools, but are not meant to supersede any other arrangements which may have been found to work well.

4. *Rules of Admission, &c.*—The co-operation of parents in the education of their children cannot be too strongly insisted upon. The schoolmaster is only a substitute, wisely provided because parents do not generally possess the ability to teach, or, if they do, cannot command the necessary time. It must however be remembered

that, when the child is handed over to the teacher, the responsibility of the parent by no means ceases; on the contrary, it should be kept alive by every legitimate stimulus. Unfortunately, amongst the poorer classes, so much prejudice and misapprehension are to be found, that parents often manifest an adverse feeling to the school-master, and consequently very much impede his efforts for the improvement of their children. In such cases much may be done by a friendly visit from the master, who however on such occasions must be careful to maintain a conciliatory manner, and to bear patiently with ignorance and caprice. Rules or hints (of which the subjoined are a specimen) are in many cases issued for the use of parents, with a view to securing their hearty co-operation in carrying out the regulations of the school:—

### RULES

*To be observed by the Parents of Children attending the National School at* \_\_\_\_\_

Parents who wish to get their children admitted into the above-named school, may do so by applying to the Master on any Monday morning, at a quarter before 9 o'clock.

Parents are requested to pay particular attention to the following rules:—

1. The children are to assemble at the school on every week-day morning at a quarter before 9, and every afternoon at a quarter before 2 o'clock, except Saturday, which is a holiday.

2. On the Sunday the children meet in the morning at \_\_\_\_\_, and in the afternoon at \_\_\_\_\_ o'clock.

3. The school-hours are from 9 to 12, and 2 to 5, in the summer; and from 9 to 12, and 2 to 4, in the winter.

4. The children must be sent to school clean and neat in person and dress.

5. No child may stay from school without leave from the Master.

6. Leave of absence will be readily granted, either by appli-

cation personally or by note; this application must be made before, and not after, the child absents itself.

7. If any child come late, or be absent, a ticket of suspension will be sent, requiring a reason from the parent.

8. If the ticket be disregarded, the child will not be allowed to attend the school until a satisfactory answer has been given by the parent.

9. Every child must bring a week, to be paid in advance every Monday morning: if there should be three children in one family desirous of attending the school, the third will be admitted free.

10. No child will be admitted under the age of six years.

*N.B. No child will be admitted until it has been vaccinated.*

In constructing Time-tables for mixed schools, care should be taken to arrange the subjects in such a manner that the girls, who are supposed to be taught with the boys in the morning only, may receive a tolerably complete course of instruction. In order to compensate as much as possible to the girls for the additional progress which the boys may be expected to make in the afternoon, certain lessons may be given to the girls in a separate division of the class. For secular reading for the mixed classes during the morning, it is advisable to use a book containing detached pieces; while in the afternoon the boys may read some continuous narrative,—for instance, English History. It is presumed that in most mixed schools the girls' sewing can be taught in a separate apartment; but, where this is not practicable, the girls may be allowed to occupy the squares and the boys the desks. A curtain may also be used, or a framed partition, as recommended at page 2.

Each class should have its part of the general time-table written out and pasted inside the cover of the class-box, and the teacher or monitor should be required to act in strict accordance with its directions.

Besides a time-table setting forth the subjects of instruc-

tion and the duration of the lessons, every school should have a graduated course laid down, defining how far each class may proceed in the different subjects taught in it ; and the master will do well to observe that his monitors, or assistants, confine themselves to the prescribed limits. It is the habit of all young and inexperienced teachers to hurry on to the more difficult parts of a subject before the rudiments or first principles have been thoroughly mastered.

The following graduated scheme of instruction for a school of six classes may be of some assistance to those who are disposed to follow the plan here recommended :—

#### GRADUATED SCHEME OF INSTRUCTION FOR A SCHOOL OF SIX CLASSES.\*

##### *First Class.*

Read Old and New Testament.

Catechism, with Analysis and Scripture proofs.

Questions on the Order for Morning and Evening Prayer.  
(Archdeacon Sinclair.)

Arithmetic, including Proportion, as far as Vulgar and Decimal Fractions.

Secular reading ; English History.

Parsing simple sentences ; Easy Composition.

Grammar and the Derivation of Words.

Mathematical, Physical, and Political Geography.

Vocal Music ; Linear Drawing.

##### *Second Class.*

Read the Gospel of St. Matthew and the Acts of the Apostles.

Questions on Scripture History.

Catechism, with Analysis and Scripture proofs, and Liturgy.

\* A scheme for *six* or *twelve* months, limiting each subject, might be arranged.



Arithmetic, as far as Proportion.

Secular reading, with Dictation.

Parsing simple sentences; Definitions of Grammar.

Geography of Europe, England, and Wales, and Palestine.

Linear Drawing; Vocal Music.

### *Third Class.*

Read the Gospel of St. Matthew.

Catechism, with Scripture proofs, as far as the Lord's Prayer. (Sinclair.)

Easy Scripture History; Lives of the Patriarchs.

Arithmetic, including the Compound Rules.

Secular reading, with Dictation.

Definitions of the leading parts of speech.

Geography of the World.

Linear Drawing; Vocal Music.

### *Fourth Class.*

Read "Miracles and Discourses of our Blessed Saviour."

Catechism, as far as the Decalogue, with Scripture proofs.

Arithmetic, four first rules and Reduction.

Grammar, simple definitions of Vowels and Consonants, Nouns, &c.

Easy definitions of Geography—Land, Water, &c.

Secular reading, with spelling.

### *Fifth Class.*

Read "Parables."

Catechism, as far as the Creed.

Arithmetic—Addition, Subtraction.

Secular reading, with spelling from the Reading Lesson.

*Sixth Class.*

Broken Catechism.

Reading, with Spelling.

Arithmetic—Counting and Addition, Notation.

---

---

## CHAPTER II.

### ON SCHOOL DISCIPLINE.

UNDER the term *discipline* may be included all that has reference to the *moral* government of the school. Its object is to accustom the children to habits of order, obedience, and application, and to encourage in them that love for learning without which no system of education can be attended with much success.

On the personal character of the master, good discipline for the most part depends. The degree of respect in which he is held by his pupils, and the firmness and decision which he brings to bear upon their general management, will influence in no slight degree the character of the school. He must be *master* in every sense of the word. If he makes laws only to see them constantly broken, he will be likely to gain the contempt instead of the respect of those who are placed under his care.

“All the means of discipline,” says a French writer, “may be reduced to two heads: those which are designed to maintain order, which include silence, obedience, cleanliness, a becoming carriage, politeness, and general good behaviour; and others, whose aim is to accustom the pupils to application, which again supposes attention, eagerness to repair to school, and zeal in the performance of duty.”

I. The points of discipline to which a master should pay strict attention, included under the first head, are such as the following :—

1. *To be very particular in securing Regular and Punctual Attendance.*—The fault of bad attendance is, without doubt, to be attributed more frequently to the parent than to the child. The teacher should therefore impress upon parents, as often as he can, their duty in this respect. The printed rules of the school, which are generally given out on the admission of children, should set forth in a prominent manner the consequences of irregular attendance. In the case of any child being *absent without leave*, it will be found necessary to send a ticket of suspension to the parent ; and in the event of the notice being disregarded, nothing remains but to exclude the child from the advantages of the school. Painful though it must be to dismiss a child for the fault of its parent, such a step is absolutely necessary for the sake of general good discipline.

The following has been found a useful form of Suspension Ticket :—

#### SUSPENSION TICKET.

\_\_\_\_\_ 185  
 \_\_\_\_\_ having been absent  
 \_\_\_\_\_ without leave, and having thereby  
 broken the Rules of the School, you will take notice that

HE IS SUSPENDED FOR THE PRESENT ; .

and unless you attend at the School within *one* day, at a quarter before nine or two o'clock, and give a satisfactory reason for such absence, he will be finally dismissed.

To Mr. or Mrs. \_\_\_\_\_

2. The master should use every effort to obtain good order in his school-room by suppressing all unnecessary noise, especially talking, loud reading, &c., and by esta-

blishing such plans for the mechanical working of the school as are least liable to cause confusion in the room.

A system of drilling, similar to that practised among soldiers, will conduce very much to good order, and will likewise teach the children the duty of ready obedience to their teacher's commands. The exercises must however be rapidly and promptly performed. Bad drilling is worse than none, and will be likely to produce the very opposite of the desired result. When it is necessary to stop the school for drill or for any other purpose, a signal may be given either by sounding a small whistle, or by pronouncing the word "stop" in a sharp and decided tone of voice. Before a teacher commences any lesson in a class, he should drill the children into good order, observing, among other things, that they stand back to the form with their feet placed firmly and closely together on the floor; that they stand and sit at equal distances; that the same number of children occupy the side forms, &c. &c. When the lesson is being read the books should be held so as to rest on the palm of the left hand, the right hand being placed behind the back, and only used when a leaf requires to be turned. The orders for drilling are generally such as the following: "Stand," "Sit," "Hands up," "Down," "Behind," "Shoulders," "Right hand up," "Left, &c.," "Turn," "Front," "Collect pencils," "Slates."

When there is a play-ground the children may with much advantage be drilled occasionally in easy military evolutions, as slow and quick marching in lines, wheeling, &c. &c.

3. The greatest reverence and attention should be observed during all the religious exercises of the school. It will be advisable to establish as a rule, that the children close their eyes and place their hands together while any prayers are being said. No class should engage in reading the Holy Scriptures without having first repeated some prayer, as,

for instance, the Collect for the Second Sunday in Advent, which is generally printed inside the covers of our Bibles.

4. The master should by every means in his power, direct and indirect, encourage among his pupils a hatred of all those actions which openly offend morality, such as falsehood, equivocation, dishonesty, premeditated revenge, petty quarrels, &c., and should constantly impress upon them the opposite duties.

5. The children should be taught to pay due respect to those who are placed over them in the school, whether the clergy, the other school-managers, or their ordinary teachers. They should never be allowed to pass any of them, either in or out of school, without making a bow. They should also be taught to pay proper respect to the place in which they are instructed. Neither boisterous mirth in the school-room, nor running over desks and forms out of school-hours, should be permitted. When any child wishes to address a remark to the teacher, or to ask a question, he should in the first instance show, by holding up his hand, that he desires leave to speak.

The following remarks by the Ven. Archdeacon Sinclair are worthy of an attentive perusal:—

“Among the various modes of introducing discipline into a school, the most effectual is to promote a general feeling of reverence for every object connected with it. Cheerful and willing obedience should be inseparably associated with the place in the mind of every child. There are schools for the poor, in which, although the intellectual faculties are brought prominently into action, the moral feelings are lamentably neglected: you see the children enter the school-room, slovenly in their person and forward in their demeanour, without any tokens of respect for their superiors and instructors; books are neither preserved with care nor treated with regard; Holy Scripture itself is read with an air of exhibition rather than with solemnity; and

even prayer is either not said at all, or not said with devotional earnestness, or not listened to with the silent attention and in the devout posture suitable to divine worship. These are symptoms of insubordination which in a moment strike the eye even of a casual visitor. An injudicious master would resolve to suppress them at once by strong measures of corporal punishment.

“But, as in the case above stated, of imperfections in the system of tuition, so here also, where moral habits are to be changed, you will perceive the necessity of caution and deliberation. The habit of reverence is not the growth of a day, but results from repeated acts of subordination and obedience. You will provide, therefore, that when children enter school they shall show the customary obeisance, as a part of that ‘lowly and reverent submission to all their betters’ which their catechism enjoins.

“You will make them take their places in a quiet and orderly manner, and not omit to notice any deficiency in cleanliness or neatness.

“You may find advantage in making them go through certain mechanical movements and evolutions at the word of command; an occasional exercise, which not merely re-awakens attention, but produces almost instinctively an obedient temper. Above all, when you engage in prayer or reading the Scriptures, you will uniformly evince by your voice and manner that you are suitably impressed with the deep importance of this duty; you will thus excite more effectually in them a spirit of reverence corresponding to your own. Prayer thus offered at the daily opening and closing of the school will seldom fail in due course of time to subdue turbulence, soften obduracy, and introduce reverential feeling.

“As the dismissal for the day takes place immediately after prayer, you will of course conduct it in a regular and

decorous manner, suppressing noise, contention, and confusion.”\*

6. Among the other points of discipline to be observed are those which refer to personal cleanliness and neatness, and to the due preservation of the property belonging to the school. No child should be allowed to attend school with unwashed face or hands, uncombed hair, or dirty and ragged clothing. All books and school materials should be used with proper care and returned to their places after use. The room should always present a neat and tidy appearance, and, in short, all those arrangements which affect the discipline of the school should fulfil the Apostle’s precept, “Let all things be done decently and in order.”

II. The means of discipline comprised under the second head are those whose aim is to accustom the children to application and zeal in the performance of their various school duties. They include emulation and the taking of places, rewards, punishments, &c.

1. *Emulation*.—Emulation, although objected to by some persons on moral grounds, and as being contrary to the spirit of Christianity, is, more or less, almost universally practised in schools. One plan pursued is the following: When any child in a class has committed a blunder, he who stands next to him (having first signified to his teacher by holding out his hand that he wishes to speak) is allowed to correct him, and to take the higher place. If *he* should give a wrong answer also, those below are allowed to try, according to their turns, and the boy who gives the correct answer takes precedence of all those who have failed. In taking the place it is desirable that he should pass along the front of the line; and when any child is degraded to a lower position in the class, he, on the contrary, should

\* Extract from a letter to an Organizing Master by the Venerable Archdeacon Sinclair while Secretary to the National Society—published in the *Society’s Reports*.

pass along the rear. It is important that no boy except the one next to him, whose turn it was to answer, should be allowed to correct any mistake until the monitor has pointed to him, and, by so doing, has given him permission to speak. When children are allowed to correct mistakes indiscriminately and without regard to their standing in the class, noise and confusion must be the necessary result.

Another mode of causing emulation among children is by giving *rewards* or *prizes*. This plan is, however, far less common now than formerly. The necessity which once existed for such extraneous inducements, intended as they were to soften the rigour of an imperfect and unnatural system, is now happily passing away. It is to be hoped the time is at hand when children will not look upon going to school as the greatest hardship of their existence. The inattention which is so often complained of is more frequently the fault of the teacher than that of the child. Let the teacher make his lessons interesting to his pupils; let him awaken in them a natural curiosity and a desire for new information; and he will soon find that there is but little necessity for artificial means of emulation, such as prizes, medals, and other rewards.

In those schools in which it is still thought requisite to give rewards, they should mark something more than mere progress in learning. Great idleness and carelessness, combined with natural talent, will often rise above the most unwearying perseverance joined with inferior parts; it would therefore be manifestly unjust to reward the child who, notwithstanding his general inattention and indisposition to study, has been enabled merely by natural superiority to excel his more hard-working companion. Good behaviour, diligence, and application to learning, are the qualifications which appear *most* to deserve any extraordinary advantages which a school may have to bestow. It is, however, very difficult to manage any system of rewards without exciting



feelings of envy in the unsuccessful pupils, and of dissatisfaction in the minds of those parents whose children have not obtained distinction. Upon the whole, masters will do well to dispense with rewards, if possible, altogether.

*Punishments.*—In this place it appears necessary that a few words should be said in reference to *punishments*. Under the most judicious master, and in the best organized school, instances will occasionally be found of wilful misconduct and disobedience, determined and repeated inattention to studies, and utter disregard of admonition and advice. When any such instance occurs, it is absolutely essential that the master should have at his command such means of correction as shall at least prevent a *speedy* repetition of the offence. It seems almost needless to remark that the punishment should always be proportionate, and of the kind best adapted to the fault which has been committed, and that no vindictive feeling on the part of the teacher should accompany its infliction. Some persons think that a considerable interval should elapse before the punishment is applied, while others hold that no time should be lost in carrying out such measures as will be likely to bring the refractory pupil to a better state of mind. The teacher will be able to judge for himself, according to the circumstances of any particular case and his own disposition to sudden excitement, which of these two plans may be adopted with the best hope of producing the desired reformation.

Some persons altogether object to *corporal* punishment; but it will be found on experience that it is an instrument of discipline which cannot wholly be dispensed with. It is however generally admitted that its use should be as limited as possible, and that it should only be employed when all other means have failed. The master who can govern his school, only so long as the feeling of *fear* is kept alive in his pupils, is surely very unfit for his office, and under such a teacher the necessity for corporal punish-

ment will be constantly on the increase. But he who unites firmness with kindness, and who shows the children, by his constant watchfulness over them, and by the earnestness of his manner, that he has their interest too much at heart to allow their faults to escape his notice and correction, will find that personal chastisement may be almost indefinitely diminished.

In connection with the use of corporal punishment it will be well to observe the following cautions :—

1. Never to punish with the *hand*, but always with a *cane*.

2. Never to use the *cane* as a pointer, or for any purpose except that for which it is designed.

3. Never to punish on any part of the body which may be likely to receive permanent injury from the application of the cane. The palm of the hand appears to be most appropriate. Leaving a mark upon any part of the body should be carefully avoided.

4. Never to allow the monitors or the subordinate teachers the use of the *cane*.

5. Never to torture children by making them keep the body in any inconvenient position for a long period of time, as by holding up the hands over the head, &c. &c. Kneeling as a punishment is also highly objectionable.

The plan of setting *tasks*, or, as they are sometimes called, *impositions*, which involve confinement in school after the ordinary hours of study, if used as a punishment, is generally considered objectionable on account of its tendency to associate the very attendance at school with the notion of punishment. There are, however, other secondary modes of punishment, such as making the delinquent lose his place in the class, or degrading him to a lower division of the school, which may be resorted to before the actual infliction of bodily pain.

The following remarks by Bishop Short, on the subject

of secondary punishments, are well deserving of attention : —“ By the term secondary punishment we mean such punishments as derive their whole force from being inflicted as punishments. One child may feel a beating more acutely than another, but the blow is in itself a punishment. Whereas the being placed on a bench, and exposed to the gaze of the other children, may be regarded as a punishment or a reward, according to the manner in which it is done. There must be punishments as well as some species of reward ; and as the frequent use of actual punishments will generally injure those on whom they are inflicted, and will gradually destroy their force, it is necessary to establish a scale of secondary punishments, which, by being judiciously varied, shall continue to be esteemed punishments without being injurious to those on whom they are imposed. The least severe class of punishments are those which only arrest the attention of the offender and are immediately discontinued. While these continue to be effectual we shall have no need of proceeding to any further severity. While the eye of the master, or of the monitor, will command respect, it is not necessary even to speak. While the voice is obeyed we need not resort to any secondary punishments. While small secondary punishments are effective we need not have recourse to severe ones. If severe punishments of a secondary sort do not produce their effect we must change them ; and when our resources are exhausted, we must ultimately betake ourselves to actual inflictions ; for discipline must be preserved at any expense.”

To assist in carrying out the mechanical points of discipline in large schools, it is usual to appoint one of the senior pupil-teachers or monitors to the office of usher.

Among his duties may be mentioned the following :—

1. To see that the children assemble in the morning and afternoon without noise and confusion.

2. To drill the classes collectively before prayers, and at other times in the day when it may appear necessary.
3. To make up the attendance and absence registers of the whole school.
4. To watch the change of classes from desks to squares, &c. &c.
5. To look after the covering of books, and to see that the boxes are kept tidy. To pay attention also to the general order and neatness of the school-room.
6. To dismiss the school.

When not engaged in any of the foregoing duties, the usher should assist in teaching a class, subject to the direction of the master.

---

### CHAPTER III.

#### ON THE QUALIFICATIONS AND DUTIES OF THE TEACHER.

THE requisite qualifications for a teacher may best be estimated by considering the nature of what he has to teach. It is now almost universally acknowledged that something more is required of him than to give instruction in the mere mechanical parts of *reading, writing, and arithmetic*. The conviction is daily gaining ground that it is the duty of the teacher not so much to supply his pupils with a certain amount of information on subjects of human learning, as to *educate* them in a higher sense—viz. to develop their mental powers, and to excite in them a desire for future intellectual culture. And, besides this, it is not less his duty to urge upon them such motives of conduct as shall foster habits of honesty, industry, and sobriety; and as shall lead them “to learn and labour truly to get their own living, and to do their duty in that state of life unto which it shall please God to call them.”

In reply to the question, "To what end do we seek to educate the poor man's child?" Mr. Coleridge remarks, "Is it not to give him just views of his moral and religious obligations, his true interests for time and eternity, while at the same time we prepare him for the successful discharge of his civil duties—duties for which, however humble, there is surely some appropriate instruction? Is it not to cultivate good habits in a ground of self-respect—habits of regular industry and self-control; of kindness and forbearance; of personal and domestic cleanliness; of decency and order? Is it not to awaken in him the faculties of attention and memory, of reflection and judgment—not merely to instil knowledge or supply the materials of thought, but to elicit and to exercise the powers of thinking? Is it not to train him in the use of language, the organ of reason and the symbol of his humanity? And while we thus place the child in a condition to look onward and upward—while we teach him his relationship to the eternal and the heavenly, and encourage him to live by his faith—do we not also hope to place him on a vantage-ground with regard to his earthly calling?—to give to labour the interest of intelligence and the elevation of duty, and to disarm those temptations by which the poor man's leisure is so fearfully beset, and to which mental vacuity offers no resistance?"

To qualify a person for the adequate performance of such high and responsible duties as those which have been mentioned, it has for some time been obvious to those who are interested in the cause of education that a course of previous training is in ordinary cases absolutely necessary.

It does not fall within the limits of the present work to enter into a detailed account of the plans pursued in the different training colleges; it is rather its business to state briefly what qualifications may reasonably be expected in

the trained master, and to give a few hints as to the best mode of performing the duties of the office, which are of necessity rendered more responsible by the amount of training now generally brought to bear on the character of the teacher.

He must then, first and above all things, possess sound moral and religious principles; he must have a natural aptitude for teaching, and a fondness for children; be ready to exercise patience and forbearance, and to sympathise with the peculiarities of childhood. He must not be deficient in bodily vigour and activity; and must ever be on the look-out to extend the knowledge, both intellectual and mechanical, which he has acquired during his course of training. And, to descend somewhat more into particulars, he must have ever before him this solemn truth, that it is his business to teach the children under his care their duties towards God and man; to instil into their minds correct principles; to train them in habits of cleanliness, order, and punctuality; and to inspire them with a love for what is good and amiable, and a corresponding hatred for those things which degrade human nature. In doing all this, however, he must depend chiefly on the force of his own *example* more than on his positive teaching. He must, therefore, be regular and punctual in his attendance on public worship, and in all other religious observances. He must be reverent in his use of the sacred volume, and in conducting the devotions of the school, if he wishes to see his pupils evince a reverence for holy things; and in the same way his own habits must be the pattern by which the children must be instructed in the due regulation of the affections and the performance of their social duties. His own habits must correspond with those which he wishes to teach. Does he wish to make his pupils regular and punctual? He must himself practise regularity and punctuality. He should be in the school some minutes before the time

fixed for prayers. All his arrangements in the school-room, from the most important down to the minutest particular, must be, as it were, so many silent models for imitation, if he desires to make his pupils orderly in their habits. To induce his pupils to be clean and tidy in their persons, he must pay the most scrupulous attention to his own appearance, avoiding all extravagant display, and endeavouring to place before them in this, as well as in all other respects, a pattern which shall be worthy of their closest imitation.

Much more might be said in reference to the influence which the master's example must have upon the general tone and character of his teaching. In the chapter on "Discipline" several points were set forward which may be considered as closely connected with the subject now under consideration, and which it is therefore deemed unnecessary to repeat here. We pass on to say a few words on the qualifications which the teacher should evince in the actual communication of knowledge to his pupils. "It should," to use the words of a good authority, "be the very life and soul of the system. If he be indolent, his monitors and pupils will be alike inactive; if he be enthusiastic, they, to a certain degree, will participate in his energy. Nothing can be a greater mistake than to suppose that under the monitorial system the master may for a single moment be idle without injury to his school. If, during school-hours, he be not incessantly, actively employed, his school must suffer in proportion, be the qualifications or learning of his monitors what they may. He ought seldom or never to be found in his desk, but always on the floor among his pupils, and almost always in the act of teaching. It is quite erroneous to suppose that it is the monitors alone whom he is to teach; and that at all times the only duty which he has to perform is the superintendence of general order. He ought, on the contrary, to visit and to teach every class as its circumstances may demand; and, with

regard to the inferior classes in particular, where every lesson is a new step, they ought never to be allowed to pass from one lesson to another without undergoing a previous personal examination by himself, in order to determine whether the class is fit to advance, and whether any of its individual scholars must be left behind in an inferior one."

To these remarks it may be added, that he should strive to preserve, as far as he can, a perfect command over his temper; never to exhibit petulance or ill-humour if his pupils do not appear to realize that benefit, from his teaching which he considers they ought to have received. Often has an unfortunate child been punished for alleged inattention or stupidity when the real fault has been in the teacher, because either his manner has been listless and wearisome, or his explanations have failed to reach the child's comprehension.

With regard to the *attainments* necessary for a national schoolmaster, it is impossible to fix any particular limits. No amount of qualification in this respect, uncombined with *aptitude in teaching*, can make a good master; although it is most certain that the more thoroughly a judicious and intelligent teacher is acquainted with his subject, the better will he be likely to convey a knowledge of it to others. In addition to an accurate and extensive acquaintance with the precise branches he has to teach, he should possess a good fund of *general information*, that he may be ready to turn to account anything which may occur in the course of his lessons, either from the answers of the children, or from any collateral knowledge which the subject itself may suggest. He should constantly endeavour (no matter how highly qualified in regard to acquirements he may be on entering his profession) to increase his knowledge by private study. He should spend some time daily, out of school-hours, in the preparation of lessons, and should ever



be on the watch how he may acquire greater readiness in conveying instruction to his pupils.

In the following chapter an attempt will be made to explain briefly the best technical methods of teaching ; and some remarks will afterwards be made on the teaching of particular subjects, with " notes of lessons," and other information, which it is hoped may be serviceable to those who are anxious to carry out the principles which have been recommended.

---

---

## CHAPTER IV.

### ON TEACHING.

THE different forms which instruction may take, both with respect to the teacher and the scholar, have given rise to the term "Methods of Teaching." These methods are often referred to in educational works by such titles as the following : — " individual," " mutual," " simultaneous," " synthetical," " analytical," and " catechetical methods." It is therefore considered necessary to explain briefly the general meaning of the principal terms in use, before considering the methods by which particular subjects may be taught.

*Individual* teaching is that in which the teacher addresses himself directly to one person only at the same time, his other pupils being engaged in the silent preparation of their lessons, awaiting their respective turns to share his time and attention. It would require little calculation to show that, in a large school, under one master, each individual scholar would be entitled, according to this plan, to a very small portion only of actual instruction, even sup-

posing the master could continue his teaching throughout every consecutive minute of the day. The necessity of collecting a large number of children in the same place, and at the same time, has given rise to the method of *mutual* teaching, the original organization of which is connected with the names of Bell and Lancaster. According to the *mutual* plan, the children of like attainments are grouped together in classes, and, the whole mass being taught by the master, a considerable portion of his time is indirectly secured to each child. The individual method is more effective than the mutual, inasmuch as it allows the teacher to come into closer contact with his pupils, and to become more intimately acquainted with their particular dispositions and capabilities; but it cannot be practised exclusively, for the reasons just mentioned. It is however deemed advisable to combine its use with that of mutual teaching, whenever it is practicable. Thus, in questioning a class, the teacher should require the answer to be given by one boy selected from the class, although he should at the same time make it well understood that *he* who answers is only, as it were, spokesman for the rest, it being the duty of all to pay the same attention as though they were individually addressed. In some schools it is customary to allow the whole class to speak at once. When this is the case, the method adopted is distinguished by the term *simultaneous*; but this plan, besides being calculated to cause great noise and confusion if employed universally, is objectionable on other grounds. The simultaneous method may, however, be occasionally used with some advantage in teaching certain subjects, as will be shown hereafter.

In connection with the *mutual* system may be mentioned "*gallery teaching*," which consists in joining two or more classes together for instruction in a gallery of parallel seats. The lesson in such cases usually takes the form of

a conversational lecture. When some production, either of nature or of art, is selected to form the subject of the teacher's remarks, it is customary to exhibit a specimen of the production to the children, and the lesson is called an "object lesson." In infant schools, where instruction is chiefly addressed to the senses, considerable use is made of this kind of teaching.

While speaking of *mutual* instruction, it may not be out of place to repeat what has been already remarked under the head of "discipline"—viz. that it is highly essential to preserve the best possible order and attention among the children during any lesson. The best lesson will be comparatively useless, if strict regard is not paid to the discipline of the class. If only one step in the lesson is unheeded, or misunderstood, it will often have a bad effect upon future progress in the more advanced parts of the subject. To prevent weariness, the teacher should make his lessons as short as may be consistent with comprehensiveness. Half an hour, or at the most three-quarters of an hour, is considered a sufficient duration for any lesson. It should be an object of especial care with the teacher to make the explanations and illustrations of his subject as interesting as possible; he should also proceed gradually with his subject, and should practise constant revisal and examination, so that first principles may be thoroughly mastered, and a proper foundation laid in the minds of his pupils.

Among other methods which require explanation are those of *synthesis* and *analysis*.

The word *synthesis* has been adopted into our language from the Greek, and means *a placing together*. It is applied to that kind of teaching in which we adopt the method of *placing together* the simple elements of any subject, one by one, and step by step, until a knowledge of the whole, in a complete form, is arrived at. The usual

plan of *teaching to read* will furnish an illustration. We first make the child acquainted with the names and sounds of letters, which are the simplest elements to which either written or spoken language may be reduced. Next we place together letters to form syllables; afterwards syllables to form words; and then words to form sentences. The word *analysis*, which has also come to us from the Greek, means just the opposite to *synthesis*. It implies *the separation of any whole into its component parts*. Applied to the teaching of language it would show how a sentence might be separated or divided into its clauses, words, syllables, and letters.

Analysis has been aptly compared to the efforts of the traveller who endeavours to find the source of a river by ascending from its mouth; synthesis, profiting by the labour of analysis, places itself at the source, and thence rapidly follows the river to its mouth.

The methods of synthesis and analysis may be mutually employed in teaching most subjects; and indeed, generally speaking, the exclusive use of either of them will rarely be attended with success. When the teacher has attempted to construct, as it were, a portion of his subject in the mind of his pupil by a *synthetic* process, he will find it necessary to *analyse* what he has done, in order to ascertain the effect which his teaching has produced. It may be requisite sometimes to apply the two methods alternately, over and over again, according to the difficulty of the subject, or the age, ability, and general aptitude of the pupil.

To lay down rules for the combination of these methods would be quite impossible. The circumstances in which a teacher is placed with regard to those whom he has to instruct are so various, that nothing except a correct judgment, joined with experience in his vocation, can serve him as an efficient guide.

Two other methods, which may be placed together by

way of contrast, are the *catechetical* method and the method of instruction by *lecturing*. In the latter method the pupil takes no part, except that of a listener. It is, therefore, little used in schools. The catechetical method, as it is in an especial degree calculated to keep up the attention of children, is the most common form which elementary teaching takes.

The literal meaning of the Greek verb *κατηχεω* (to sound down) has little apparent connection with the sense to which those words are applied which we have derived from it. We assign the term *catechetical* to the method of teaching by question and answer. Questions may be asked for the purpose of ascertaining whether the pupil has understood and remembered the subject-matter of previous lessons; but this use of the catechetical method pertains rather to *examination* than *teaching*. When this method is applied to teaching, the lesson itself is first communicated through the medium of question and answer, the catechist "first instructing his pupils by questioning the meaning into them, and then examining them by questioning it out of them." From what has been said it will be seen that the teacher will at first be obliged either to answer his own questions, or at least to give such information as may lead his scholars to answer them.

In schools where the teaching is generally of the *catechetical* kind, skill in questioning is a qualification of the highest importance. The following hints are offered; and those who desire further information are recommended to consult the valuable work of Archdeacon Bather\* on the subject. At the same time it is suggested that no amount of *theory* can make a good catechist. Considerable practice, joined with great tact and judgment, can alone insure success in the use of this important method of teaching.

\* Published by Rivington and Co.

With regard to the question it may be remarked—

1. That it should not be above the comprehension of the pupil, either in *sense* or *language*. If the question is not understood at first, the teacher should vary its form again and again, if necessary.

2. It should not require a very long answer.

3. It ought not often to be the form which will admit of the monosyllabic answers “yes” and “no:” such answers do not generally afford much exercise for the judgment.

4. The questions in a lesson should, as much as possible, be progressive, forming a connected series from beginning to end.

In reference to the *answer*, it may be remarked—

1. That it should be exact, and to the point.

2. It should not generally be in a prescribed form of words, but as much as possible in the pupil's own language.

3. The teacher should not tell the answers at once, but should lead his pupils to it from something which is already known to them. He might occasionally use ellipsis, leaving the pupil to supply the last few words of the answer.

4. Except in the case of examination or revisal, the pupil should be allowed sufficient time to think of his answer. Random answering should at all times be prohibited.

5. The teacher should not speak in tones of commendation after every correct answer. He should reserve his praise for particular occasions, when a good answer may have been given to a question of more than ordinary difficulty.\*

The following extract from the Preface to ‘Questions on Patriarchal History,’ which may be obtained in the Depository of the National Society, must close our remarks on the catechetical method. After urging the necessity of

\* These hints are similar in substance to the remarks on the catechetical method contained in Ross's Manual of Method (published by Longman and Co.)—a book full of useful matter bearing upon the teacher's vocation.

allowing the child to answer as much as possible in his own words, the writer remarks,—

“To give a *long* answer in words of his own requires a mental effort of which a child is incapable. The proper course, therefore, is to multiply the questions and subdivide the subjects, until the answer is reduced to a single clause of a sentence, which is as much as children can in general compose extemporaneously.

“A fault, occasionally found in catechetical works, although more frequently in *viva voce* examinations, is, that the questions are not always sufficiently precise, and do not actually call for the information which the scholar is nevertheless most unreasonably expected to communicate. The querist, if himself unexpectedly examined in his own book, would not always be able to divine the bearing of his own question.

“On the other hand, the question sometimes so obviously suggests the answer, as to afford no test whatever of knowledge or intelligence in the scholar.

“A further error is, that the questions in many cases have reference to minutiae which it is useless for the scholar to remember. To load his memory with innumerable dates, or with the names of persons or places of which he can know nothing but the names, is a cruel waste of time and intellect. And yet there is a strong temptation to such questions, which, however troublesome and annoying to the scholar, are very easy and satisfactory to the teacher.”

Other methods of teaching might be mentioned, but their consideration would occupy a larger space than can be afforded in a book like the present, and they would be found, perhaps, to be only more or less modifications of the methods which have been already referred to. It may however be suggested to the teacher that he should endeavour to strike out a method of his own, after having first made himself acquainted with the general principles of the

art of teaching. It is not desirable that he should confine himself to any particular system, applying it obstinately, without regard to the distinction either of time or place, of persons or circumstances; but that he should rather select from among the various systems in use those plans which his own powers will best allow him to carry out, always keeping before him the great end in view, viz. religious, moral, and intellectual education.

There are yet three points connected with the master's duties as a *teacher* to which some allusion ought to be made before dismissing the subject of general teaching. These are—

1. The plan of requiring children to learn lessons by heart and to follow up their studies at home.

2. The necessity of previous preparation of lessons by the teacher.

3. The uses of the different apparatus of teaching.

With regard to the first point it may be remarked, that of late years the rationalistic element in teaching has prevailed almost to the exclusion of the good old practice of "learning by heart." It seems to have been forgotten that *memory* is the predominant faculty in children at the age when they usually attend national schools. The power of memory should certainly be cultivated while it continues vigorous, for it *becomes* weaker as the reasoning faculties gain strength; and it is not until after the children leave school that the latter powers are developed to any great extent. The teacher may exercise the memory of his pupils without incurring the charge of being insensible to the importance of encouraging habits of thought and a desire to learn the reasons of things. All that is contended for is the *proper and sufficient* exercise of one of the noblest mental gifts of Providence, which is especially prominent in youth.

In schools which are slenderly provided with monitors



and assistants the children of some classes may be engaged in silent preparation of lessons or learning by heart, one of the eldest and most steady of the class being placed over the rest to keep order, while the master is employed in actual teaching. By a judicious arrangement of lessons on this plan, a master with one pupil-teacher or monitor will be able to manage a school of fifty or sixty children with tolerable efficiency.

The following is suggested as a routine of home lessons for the upper classes :—

Monday, Wednesday, and Friday evenings.	Preparation of "Texts illustrating the Church Catechism" (to be repeated on Tuesday, Thursday, and Monday <i>mornings</i> ), and "Definitions of Grammar" (to be repeated on Tuesday, Thursday, and Monday <i>afternoons</i> ).
Tuesday and Thursday evenings.	Preparation of "Hymns for Schools," and "Songs for Schools," alternately (to be repeated on Wednesday and Friday <i>mornings</i> ); and lessons from "Outlines of Etymology" (to be repeated on Wednesday and Friday <i>afternoons</i> ).

The boys may also be encouraged to work examples in arithmetic from their own books during the evening, and to bring their work for the inspection of the teacher on the following morning. Other exercises for the sake of variety, as, for instance, parsing, geographical definitions, composition of letters, &c., may also be occasionally required. The system of home lessons is found to be extremely popular with the parents, who are thus enabled to judge in some degree of the progress of their children. It will be noticed by the list given at pages 7 and 8, that the children should purchase their own books.

With regard to the second point, the previous preparation of lessons by the teacher, it is a matter of the highest im-

portance that no teacher should attempt to give a lesson without a previous careful study of the subject. It is not meant that he ought always to draw up his lesson on paper in all its details, and then deliver it like a lecture; nor is it considered desirable that he should confine himself literally to any form of lesson which may be laid down in a printed book. Rather he should arrange in his own mind the different parts or divisions of the subject in their proper order, and then make himself thoroughly acquainted with every necessary particular connected with it, so that he may give the lesson without hesitation and without committing errors in respect either to facts or inferences. The amount of previous writing, in the shape of notes, which may be required, will depend upon the experience of the teacher himself. The practised master, who has a perfect knowledge of his subject from having frequently gone through it, will as a matter of course make the best extempore teacher; but even such a person will be likely, if he has not thought beforehand about what he is going to do, either to misplace some divisions of the lesson, or to make and sanction blunders in minute particulars. How much more then will the young and inexperienced teacher be liable to such defects if he has not previously arranged carefully the several details of his lesson.

In the succeeding chapters, specimens of lessons will be given on various subjects, a study of which may possibly help teachers to carry out a system of previous preparation. It will be observed that the notes are not in a catechetical form. The teacher must learn to frame his own questions at the time of asking them. Now and then, however, a *leading* question may be introduced in the notes, in the preparation of which a manuscript book, rather than detached sheets, should be used. A separate book for every subject may be provided, and at first only the alternate pages used; thus leaving room for any additional matter

which may from time to time occur, the result either of private reading or of experience in teaching. When delivering the lesson it is not advisable that the note-book should be used, as the lesson should be thoroughly made up beforehand. To hold the book in the hand may possibly inspire a young teacher with confidence, and may afford the opportunity of returning to the lesson without difficulty if the attention has been distracted by any casual occurrence.

The remarks which have been made with regard to the preparation of lessons apply equally to subordinate teachers in schools. The master should inspect, *daily*, the monitors' notes before their lessons are given to the children.

On the subject of the various apparatus which have been invented to assist the teacher in his explanations, it will be more convenient to speak in future chapters, when treating of the particular subjects of instruction for which they are individually designed. There is, however, one article which, from its general use in teaching most subjects, may very properly be described here. This is the *black board*.

Black boards are made of various shapes and dimensions. Some are constructed to swing in frames, similar to looking-glasses; others consist only of a plain piece of board, which may be mounted upon an easel; and others slide up and down the grooves of two upright posts, being balanced by weights which pass over a pulley. Some are only painted black, while others have lines drawn upon one side, either for music, or for teaching writing on the Mulhauser system. *Large framed slates* are often used for the same purposes as the plain black board; and they are, in the opinion of most persons, preferable, because their surfaces are less likely to receive injury from being constantly written on. Black canvas and prepared iron are sometimes used, and have the advantage of cheapness.

The black board is intended to assist the teacher by

enabling him to instruct his pupils through the sense of *sight*, at the same time that his *oral* teaching is addressed to their sense of *hearing*. The advantage thus derived is sufficiently evident of itself; and there can be no need of any argument to show its general utility. The black board has hitherto been mostly used in demonstrating the theory of mathematical science, which in National Schools would not include more than the principles of elementary arithmetic, with occasional lessons on practical mechanics and the outlines of mathematical geography; but there is no reason that the use of the black board should not include other branches of education. Texts of Holy Scripture, facts in history, geography, &c., rules of grammar, difficult words in spelling, materials for composition, concise explanations, definitions, dates, illustrations by drawing, sketches, formation of letters in writing, &c. &c., are a few of the subjects which the teacher may very appropriately exhibit to his class through the medium of the black board or large demonstration slate.

---

---

## CHAPTER V.

### ON RELIGIOUS INSTRUCTION.

IN religious teaching the National School is the handmaid of the Church; the lessons therefore which the master imparts should in all respects be subordinate to those of the parochial clergyman. It would conduce very materially to the welfare of a school if every minister would undertake to prescribe a weekly routine of religious instruction, taking care to ascertain, by his own personal examination, how far his directions have been carried

out. He might even go so far as to examine the lessons of the teacher before they are given, so that he may be sure that no errors are contained in them; and he might do this without laying himself open to the charge of unnecessary interference, upon the ground that the responsibilities of his high office require that he should as much as possible, in his own person, look after the spiritual teaching of the lambs of his flock.

The highest department of religious education is of course Holy Scripture. Some portion of the Bible should be read daily; not, however, as a *reading* lesson, but as an exercise intended to improve the minds and hearts of the children. It is not meant that no care need be taken by the teacher with regard to the actual reading of the sacred text: on the contrary, the strictest care should be taken that the children read with intelligence, proper emphasis, and a due reverence for the importance of the subject. All that is intended is a caution against the use, too often made, of the Bible for teaching mere *reading and spelling*, and its consequent degradation to the level of an ordinary class-book.

It has been already remarked that the reading of Holy Scripture should be preceded by the use of a collect—that, for example, for the Second Sunday in Advent. During the reading of any chapter, the teacher should carefully notice everything which requires explanation—such as names of persons, places (these should be pointed out on a map), allusions to previous history, Eastern customs, prophecies, types, &c.; and, when the reading is finished, he should examine the class, in order to ascertain how far his pupils have profited by the exercise in which they have been engaged.

In addition to this method of teaching the truths contained in the Bible, lessons may be given to individual classes, or to combined sections, in a catechetical form,

*without previous reading.* For such instruction the historical parts of Scripture, the lives of eminent persons recorded in Holy Writ, our Saviour's parables, &c., are appropriate subjects. The teacher must be careful in these lessons not to run into mere matters of detail: he should, as he passes along, clear up difficulties, deduce principles, and give to the whole as much as possible a religious and moral application. It must be remembered that "names and facts are chiefly useful from their connexion either with doctrines or moral rules; that the use of a proper name is to designate an individual of whom certain actions and characteristics are to be known and remembered; and that if no actions or characteristics are suggested by the name no place for it in the memory is required."

In reference to the other subjects of religious instruction which should be taught in National Schools the writer is glad to have it in his power to quote the language of one who, from his high position in the Church and his close acquaintance with educational matters, must rank as very high authority:\*

"Next to the Bible comes our authorized commentary upon it, the Book of Common Prayer, and, in particular, the Catechism, which contains a summary of Christian doctrine specially provided for the young. This venerable formulary must of course be thoroughly committed to memory; but, in order that it may be understood, additional questions and explanations will be necessary. In any work drawn up for this purpose the general arrangement of the Catechism should be made clear, and the reasons stated for the order in which the several parts or sections follow one another. Opportunity should be taken for defining technical terms, such as grace, faith, absolu-

\* Letter from the Venerable Archdeacon Sinclair, when Secretary of the National Society, to School Manager. See Report of National Society, for the year 1842.

tion, justification, adoption : till these terms are understood, no distinct ideas of Christianity can be conveyed. An important rule to be observed in the process of catechising is to make the children answer, as much as possible, in their own words : for this purpose, the subjects treated of should be divided into a great number of questions, so that the answer to each may be given in a sentence consisting of a single clause, which is as much as children can in general compose extemporaneously. That every member of the Church should know something of its constitution is among the clearest of all axioms ; and yet this truth has not hitherto been practically received. Even in the higher ranks of society, men of useful knowledge and literary eminence are to be found, who have no idea of what is meant by ecclesiastical polity, and can give no reason for the particular form of government and rules of discipline retained in the Church of England. It cannot, therefore, be a matter of surprise that among the lower orders a definition of the word Church, as meaning a spiritual society, with peculiar duties and privileges, and with duly constituted officers, should, in many cases, be rejected or imperfectly understood.

The whole subject is too extensive to be included in elementary instruction ; but young persons may be expected to understand so much of it as can be directly illustrated from Scripture. They may, for example, sufficiently comprehend the declaration in the original,—“ It is evident unto all men, diligently reading the Holy Scripture and ancient authors, that from the Apostles’ time there have been these orders of ministers in Christ’s Church—bishops, priests, and deacons.”

Similar in effect are the instructions to Government inspectors on the subject of religious education in schools, which were issued with the sanction of the late Archbishop of Canterbury, and which remain still in force.

The inspectors are required to ascertain, "with especial care, how far the doctrines and principles of the Church are instilled into the minds of the children; and whether the Catechism and Liturgy are explained, with the terms most commonly in use throughout the authorized version of the Scriptures."

Among other subjects connected with the religious instruction in schools may be mentioned *private* prayers for morning and evening; prayers to be said on entering and leaving church, and graces to be repeated before and after meat (all of which should be regularly and carefully taught as home lessons); texts illustrating the Church Catechism, the Liturgy, and the leading articles of religion, and easy sacred poetry.

In the lower classes the religious teaching must be, for the most part, *oral*. It should be adapted to the capacities of the children for whom it is intended, and should, as much as possible, have reference to their circumstances in life. For those who are very young, instruction cannot be made too simple. When the child is sufficiently advanced to commence learning the Church Catechism, the most copious explanation, and every available mode of illustration consistent with the dignity of the subject, should be employed. The exact and intelligent character of the language employed, the meaning of words and phrases, and the punctuation of sentences, should receive particular attention.

The following scheme, arranged for successive classes, will exhibit the order in which the chief points connected with religious subjects may be taught in National Schools. In its main features it is the same as a scheme published in the National Society's Report on St. Mark's College. (See N. S. Report, year 1843.)

1. Easy questions on Divine truths—Who God is; His all-seeing nature; His love and care for His creatures;



duty of praying to Him ; *The Lord's Prayer*. Appeals to the child's sense of right and wrong. Simple stories from Scripture, illustrative of the duties of children ; our Lord's example of obedience to parents, &c. ; Samuel's early piety ; the judgment upon children who mocked Elisha ; our Lord's consideration for children.

2. Easy lessons on matters of belief, extracted from the Apostles' Creed. Meaning of the word Bible. The divisions of the Bible, Old and New Testament. The Gospel. *Scripture History*.—Some account of the Creation ; our first parents ; the fall ; first promise of a Saviour ; lives of antediluvian patriarchs. Further account of our Blessed Saviour—his miracles, &c. Easy lessons on duty to God and to our neighbour—illustrations from our Lord's parables.

3. The Apostles' Creed more fully explained, with the question from the Catechism, "What dost thou chiefly learn by these articles of this Belief?"—meaning of the words "created," "redeemed," "sanctified." *Scripture History*.—The Deluge. Patriarchal history. The Exodus. Giving of the Law. Further lesson on duty, derived from the Ten Commandments. Continuation of lessons on the Gospels—names of the apostles, &c. History of our Lord—His parables, &c. Geography of Palestine, with some account of Jerusalem ; the temple ; Jewish customs, &c.

4. Baptism explained as a covenant. What is your name? Scriptural authority for giving names at baptism ; godfathers and godmothers. The Ten Commandments further explained, and compared with the paraphrases in the Church Catechism ; revision of parts already learned, with fuller explanation of the creed. *Scripture History*.—Revision, with history of the Israelites under Joshua and the Judges. Allusion to types and prophecies respecting our Saviour, and their fulfilment. History of our Lord to the time of his ascension ; the period of his life on earth compared with contemporaneous ancient history. The Roman

emperors. Political divisions of Judæa; government of Pilate. Fulfilment of the prophecy of Jacob. Genesis xlix. 10. Jewish sects.

5. The sacraments. Baptism as a sacrament. The sacrifice of the death of Christ how typified. The fulfilment of the Jewish law in the coming of Christ. Feasts of the Jews. *Scripture History*.—The kingdoms of Israel and Judah, united and separated, to the time of the Babylonish captivity; the history of the early Church, as recorded in the Acts of the Apostles; God's judgments on the Jews—the destruction of their city and their dispersion compared with prophecy. The constitution of the Christian Church—bishops, priests, deacons. First persecutions; St. Paul; his history; apostolical journies, and the foundation of churches; the Epistles, to whom written, and why.

6. The Church Catechism complete, with full analysis and Scripture proofs. General Scripture History, with some account of the history of the Jews after the captivity. The connexion of the Old and New Testaments. Epitome of early Church history; names of the principal churches, and by whom founded; early fathers whose writings have come down to us. Apostolical fathers. Continuation of Church history—introduction of Christianity into our own island; early British Church; the Reformation, &c. The history of the Book of Common Prayer; explanation of its contents, with Scripture proofs.

The foregoing scheme contains some of the most prominent of those points connected with religious instruction, with which young persons should be acquainted before they leave school. It has been drawn up rather for the purpose of suggesting the order, than of giving even an approximation to a complete list, of religious subjects. Teachers, it is hoped, will readily fill up for themselves the faint outline which has been here given. The lessons on the Book of Common Prayer which are mentioned only in

the sixth section might commence earlier in the course; the explanations at first being made to refer to the modes of conducting worship, the interpretations of rubrics, &c. The arguments in favour of precomposed forms of prayer, and of the doctrines of the Church of England, may be reserved for older pupils.

The following notes of lessons will afford further illustrations of the remarks which have been made on religious teaching. They contain most of the information necessary for an advanced class on the particular branches of the subjects to which they severally refer; but they may be simplified if used for younger pupils. Their length is by no means intended to represent an arbitrary standard for similar lessons. Most of them, indeed, contain sufficient matter for two lessons; but the amount of information which may be conveyed in one lesson must always vary according to the capacities of the children, and the teacher's power of amplification in communicating instruction.

---

#### LESSON ON ONE OF OUR LORD'S PARABLES.

##### *Introductory.*

What is the meaning of the word *parable*?      The word from which *parable* is derived, means, to place side by side, and thus *to compare*.

A parable is a narrative of what has happened, or might have happened in this world, told for the purpose of conveying some religious or moral lesson. "An earthly story with a heavenly meaning." The method of teaching by parables was very common in ancient times. Refer to instances in the Old Testament, as that of Nathan to David; and to heathen writers, Æsop's "Fables." If the narrative be not literally true, there is no *lie* in telling

it, because the teacher does not tell it with any intention to *deceive*.

The design of teaching by parables was—

1. To convey truth in a manner interesting to the mind, and to teach by appeals to the *senses*.

2. To convey some offensive truth, or personal rebuke, in such a way as to bring it home to the conscience, as *Nathan to David*.

3. To conceal from one part of the audience what it is intended the other part should understand, as our Lord often instructed his disciples in the presence of the Jews by parables, which the latter could not understand.—St. Mark iv. 33; Matt. xiii. 13-16.

The parables of our Lord are remarkable for their clearness and simplicity. They are generally taken from the affairs of common life, and are intelligible even to the most uneducated.

### *Parable of the Good Samaritan (St. Luke x.).*

#### *ision of the Subject. Notes and Method of Explanation.*

The circumstances under which the parable was de-  
ed.

I. A certain lawyer had proposed a question to our Lord. St. Luke x. 25. The lawyers or scribes were public writers, and expounders of the law. (Comp. St. Matt. ii. 25, with St. Mark xii. 28.) The lawyer's design was to "tempt" Christ, to entangle him in his discourse. See also St. Matt. xxii. 15, 23; St. Luke xi. 53, 54. This most important question, proposed also by the young ruler, St. Mark x. 17; by our Lord's disciples, St. John vi. 28; and by the jailor of Philippi, Acts xvi. 30. Our Lord refers the lawyer to the law of which

he was a teacher. (Compare St. John iii. 10 ; Rom. ii. 21.) He readily replied in the words of Deut. vi. 5 ; Lev. xix. 18. The former passage was one of those written on the phylacteries, and was daily read in the Synagogues. His reply gained our Lord's approbation ; as also on another occasion, St. Mark xii. 34. The narrow notions of the Jews leading them to despise all who were not the natural descendants of Abraham (St. Matt. v. 43), and to pride themselves on this subject (St. John viii. 33, St. Matt. iii. 9), prompted the question, " But who is my *neighbour* ?" To answer this question, and to correct these selfish principles, was the design of the parable.

## II. The Parable.

II. St. Luke x. 30-35. (*Elicit from the children the narrative in their own words.*)

The scene laid with great propriety in the road between Jerusalem and Jericho. (*Point out the places on the map.*) The country rocky and mountainous, and very much infested with robbers. Recently, according to Josephus, Herod had dismissed about 40,000 men, who had been engaged in the buildings of the temple, and a large part of them had become highwaymen.

(Explain who was a *Priest*, a *Levite*, a *Samaritan*,) and show why our Saviour selected each of these characters. Refer to the state of feeling which existed between the Jews and the Samaritans, and its origin. See St. John iv. 9, viii. 48 ; St. Luke ix. 51, &c. Our Saviour, on one occasion, commended the conduct of a Samaritan in the presence of the Jews, St. Luke xvii. 17, 18, to show them the unreasonableness

of this enmity, and doubtless for the same reason introduced a Samaritan in His parable.

I. The lesson  
Lord intended  
ach.

III. Our Lord's question after the parable, and the lawyer's answer, will suggest the train of thought best calculated to deduce the moral lesson which was intended to be taught. We may learn—

1. That the law must be obeyed in its spirit as well as in the letter. See our Lord's Sermon on the Mount, St. Matt. v. &c., Acts xvii. 26. Proximity of abode is not what constitutes neighbourhood in the sense of the precept, "Thou shalt love thy neighbour as thyself." Every human creature is our neighbour.

2. That we must practise self-denial in order to do good to others.

3. That we must love and do good even to our enemies, St. Matt. v. 43, 44; Rom. xii. 20, 21.

4. That it is our duty to perform acts of mercy for all men, even if we become acquainted with their calamities only in an accidental manner.

5. That religious differences must not prevent us from assisting our fellow creatures when they require our help. The Jew and the Samaritan were violently opposed to each other in matters of religion.

#### NOTES OF A LESSON ON SCRIPTURE HISTORY.—The Judges.

10 were the  
:s?

Persons raised up by God under extraordinary circumstances to govern the Israelites, whose ordinary government was a *Theocracy*. Explain the word.

What book contains an account of their history? Judges and part of the 1st Samuel. Their history probably written by Samuel.

Period of their government. From the death of Joshua (B.C. 1443) to the accession of Saul (B.C. 1095). St. Paul (Acts xiii. 20) says in round numbers 450 years.

Their number. Fourteen, from Othniel (first), to Samuel (last).

Names of the chief of the Judges, and for what they were remarkable.

1. Othniel. Delivered the Israelites from their servitude under Cushan, King of Mesopotamia (8 years).

2. Ehud. From Eglon, King of Moab.

3. Shamgar. From the Philistines. Slew 600 with an ox goad.

4. Deborah and Barak. From Sisera and the Canaanites. Song of Deborah. Other songs of deliverance. Moses. David. Ps. lxxxiii.

5. Gideon. From the Midianites. The signs and the dream vouchsafed to him. His slaying the Kings of Midian, Zebah and Zalmunna, alluded to in Psalm lxxxiii.

6. Jephthah. Conquered the Ammonites. His rash vow. Other instances of rash vows.

7. Samson. Promised to his parents by an angel. Other promises of a similar kind, Sarah, Hannah, Elizabeth, Mary. His great strength and victory. The circumstances of his death.

8. Eli. His life and awful end.

9. Samuel. *The last and best of the Judges.*

Lessons from the Judges. *First*, from their general history. Why the Israelites were so frequently invaded?

As a punishment for their ingratitude. God's care for His peculiar people.

*Second*, from particular lives. *Barak's* want of moral courage, and the consequences. *Gideon's* ready obedience to God, and the encouragement he received by dreams, &c. *Jephthah's* rash vow ; the folly and sin of rash vows. *Samson*, the insufficiency of human strength and the abuse of natural endowments. *Eli*, neglect of parental duty. *Samuel*, example of early piety.

NOTES OF A LESSON ON THE LIFE OF ELIJAH.—1 Kings xvii. to 2 Kings ii.

Elijah, called the *Tishbite*, a prophet sent by God, during the reigns of Ahab and Ahaziah, kings of Israel. Why sent ?

Tishbe in Gilead beyond Jordan ; called *Elias* in the New Testament. Difference arising from the Greek and Hebrew forms. Sent to oppose idolatry, especially the worship of Baal. He brought a drought upon the land, which lasted three years. Concealed himself during the time by the brook Cherith, where he was fed by ravens. Afterwards dwelt with the widow of Zarephath.

A contest proposed to Ahab with the worshippers of Baal.

Particulars of the contest (1 Kings xviii. 4).

He incurs the enmity of Jezebel.

Fled to Arabia (Mount Horeb), miraculously supported for 40 days and 40 nights. The tempest, the earthquake, the fire, the still small voice. Commanded to return and anoint Hazael, Jehu, and Elisha.

He denounces God's judgment against Ahab and Jezebel, for taking Naboth's vineyard.

1 Kings xxi.



Reproves Ahab for sending to Baalzebub.

2 Kings i. 10, 12.

His translation, and endowment of Elisha with a double portion of his spirit.

2 Kings ii. Enoch's translation.

Review of Elijah's miracles and prophecies.

1st. With regard to the drought, and being fed by ravens.

2nd. Multiplying the widow's meal and oil.

3rd. Raising the widow's son.

4th. The consuming of the sacrifice by fire from Heaven at his prayer, when the prophets of Baal appealed in vain to their God.

5th. His being miraculously sustained at Mount Horeb.

6th. His prophecies against Ahab and Jezebel, Ahaziah.

7th. Consuming Ahaziah's soldiers.

8th. Dividing the Jordan.

Lessons from the life of Elijah.

To follow his example, and keep ourselves free from idolatry of every kind (whether actual or only in reference to our thoughts), however much it may prevail around us. To seek to convince our irreligious fellow-creatures of the error of their ways, as Elijah strove to convince the worshippers of Baal. We may suppose, from the destruction of the 450, that after the consuming of Elijah's sacrifice they remained unconvinced. God's preservation of Elijah during the famine and at Mount Horeb; how "*He careth for the righteous.*" The happy end of Elijah.

---

## CHURCH CATECHISM.

*Lesson on the First Commandment.\**

“Thou shalt have none other gods but me.”

This commandment is directed against having—

1. No god.
2. False gods *instead* of the true God.
3. False gods *in addition* to the true God.
4. The true God falsely viewed.

1. Heb. xi. 6. Of Atheists (see P.s xiv. 1.). Some are avowedly such: others practically though not avowedly. Titus i. 16. The existence of a God is evident. Rom. i. 20; Acts xiv. 17.

2. Many such (false gods). 1 Cor. viii. 5. Mentioned in Scripture by name. Judges ii. 13; xi. 24; xvi. 23; Acts xiv. 11, 12; xix. 35.

Other objects of worship. Job xxxi. 26-28; Acts vii. 42, 43; Rom. i. 23; 1 Cor. x. 20.

They who worship such, have, in fact, no God. Ephes. ii. 12; Gal. iv. 8.

3. The Israelites were guilty of this sin. Zeph. i. 5; 1 Kings xviii. 21. And the Samaritans. 2 Kings xvii. 41. Also Solomon. 1 Kings xi. 4-7.

Christians may be guilty of the same. St. Matt. vi. 24; Phil. iii. 19.

4. Persons who are guilty of this are—

Deists. St. John xiv. 1.

Jews. *Ibid.*

Socinians. St. John iii. 36; 1 John ii. 23.

And Christians, who take false views of God's attributes, &c. As some lose sight of His mercy in His justice, and hence despair; others of His justice in His mercy, and hence presume.

---

\* From “Catechetical Lessons” (published by J. H. Parker). These lessons are similar to “Questions illustrating the Church Catechism,” by the Ven. Archdeacon Sinclair (published by the S. P. C. K.); except that the former are compiled as notes, leaving the teacher to supply the questions at the time of asking them, while the latter work is already arranged in a catechetical form.

## NOTES OF A LESSON ON THE BOOK OF COMMON PRAYER.\*

*On Liturgies.*

*Liturgy.*—Meaning of the word.

A form of worship ministered in public.

Authority for set forms.

1. Refer to passages of Scripture. The entire law as given by God through Moses. Numb. vi. 22-27; Exod. xv. 1-22; Deut. xxvi. 5-13; Joel ii. 17.

1. The practice of the Jews, derived from God.

The Psalms composed specially for Jewish worship.

2. Example of our Lord.

2. Our Lord attended the worship of the Temple and the synagogues, where set forms were used. He composed the Lord's Prayer for the use of his Church. St. Luke xi. 1, 2.

A form was probably used at the Last Supper. St. Matt. xxvi. 30.

3. — his Apostles.

3. The Apostles (Acts iv. 24-30) used a prescribed form. If not, how could they have lifted up their voices "*with one accord?*" See also St. Luke xxiv. 53, and other places, where their attendance in the temple and synagogues is mentioned.

4. — the Early Church.

4. St. Mark and St. James the Less, Bishop of Jerusalem, composed Liturgies for the use of their respective churches (Alexandria and Jerusalem). A complete Liturgy, that of St. Gelasius, existed for certain, A.D. 370, and no doubt many others long before.

That which is called in our Prayer Books

---

\* This lesson is a little altered from one which is to be found in "Catechetical Lessons," published by J. H. Parker.

the *Prayer of St. Chrysostom*, now included in our Morning and Evening Prayer. Most parts of our Liturgy derived from ancient sources; instances, "Te Deum," "Benedicite, &c.," *Collect for Peace*, for Grace, &c.

Liturgies, how useful.

1. As standards of faith and doctrine, or preventives of heresy.
2. As standards of practice.
3. As bonds of union. Explain the advantages of uniformity in worship.
4. As rendering public worship least dependant on those who minister.
5. To avoid uttering anything hasty (or unpremeditated) *before God*. See Eccles. v. 2.
6. As enabling those who cannot go to church, or who cannot *hear* the minister, to join in the prayers.
7. As helps to private devotion.
8. As pre-occupying the thoughts, and thus helping to secure the attention. Refer to Cor. xiv. 15; Rom. xv. 6.

## CHAPTER VI.

### ON READING, SPELLING, GRAMMAR AND ETYMOLOGY.

It must be acknowledged by all who are acquainted with National Schools, that a great want of skill prevails with regard to the art of *teaching to read*. Often may a child be heard to read a sentence with tolerable correctness as to the pronunciation of words, but how seldom does he appear to realize the sense of the author, either in whole or even

in part ! He learns to give *utterance* to written language, but he fails altogether in *expression* ; he accomplishes the task of putting together a series of *words*, but the acquisition of *ideas*, which is the true end and object of reading, is not attained. The reason of this unsatisfactory state of things is too often the incapacity of the teacher, which in most cases arises from ignorance of the true principles of the art of reading.

Among the defects which are most common in schools the following may be mentioned :—

I.—With regard to the *pronunciation of letters*, as—

*a.* The vowel sounds imperfectly or incorrectly made long where they ought to be short, and *vice versâ*.

*b.* One vowel sound substituted for another, as that of *e* for *a*, which is a very common error.

*c.* The interchange of *v* for *w* and *w* for *v*.

*d.* The omission of the letter *h* where it ought to be aspirated, and the using it where it either does not exist, or ought to be silent.

*e.* The addition of *r* at the end of words ending with vowels, as *sawr* for *saw* ; *Elizar* for *Eliza*.

*f.* Changing the sound of *g* to that of *h*, as *somethink* for *something*.

*g.* Changing the termination *en*, *ain*, *eign*, into *ing*, as *garding* for *garden* ; *mounting* for *mountain* ; *sovering* for *sovereign*.

II.—With regard to the *pronunciation of words*, as—

*a.* The omission of small words altogether.

*b.* Imperfect utterance or slurring over small words.

*c.* The accent placed on the wrong syllables of words.

III.—With regard to *emphasis*, as—

Being wrongly placed. Pronouns and prepositions are the words on which generally too much emphasis is laid :

such words never want to be strongly marked unless they are placed in opposition. The same may be remarked of words which are sometimes called *auxiliary verbs*.

IV.—Too rapid utterance of words, and inattention to stops.

V.—Wrong expression.

To remedy these defects, or rather to prevent their occurrence, reading lessons should from the first be framed upon rational principles. The old plan of teaching to read was purely *mechanical*; for this must be substituted, as is already the case to some extent, a system in which the *intellectual* element may obtain its proper place.

Instead of making children blunder over the alphabet for some two or three years, in almost hopeless drudgery, its acquisition under the modern infant school system is made to partake more of an amusement than a task. The plan adopted is to distribute a number of loose letters upon a board, placed horizontally on the floor, in the presence of a class of children who are seated in a gallery. A printed alphabet, with letters of corresponding appearance, is mounted upon an easel in front of the class, and the teacher commences by pointing at one of the letters on the mounted alphabet, and asking, "Who can find me a letter (from among the detached letters on the floor) like this?" A dozen little hands are immediately thrust out, and the child selected by the teacher comes down from the gallery, takes up the letter, and having given it to the teacher, returns to his or her place in the gallery. If the child has made a mistake, the same letter is again placed upon the board, and another child is allowed to try; but if the letter taken up by the child be correct, the teacher holds it as near the letter originally pointed at as he can, in order that the children may observe the resemblance. The next step is to select a child to name the

letter, and when this has been done, it is named by the whole class simultaneously, and the letter is then restored to its place among its detached companions. During this exercise, the teacher should lead the children to a correct pronunciation of the different letters, taking especial care with the vowel sounds. He might also impart additional interest to the lesson by calling the attention of the children to the visible forms of the letters, and comparing them with shapes that are familiar to their sight.

The next step after teaching the alphabet, is to instruct in the reading of *words of two letters*. At this point, to revert to the old plan, children were formerly required to rhyme over every possible combination of two letters, first the different vowels with a consonant prefixed, as *ba, be, bi, bo, bu, by; ca, ce, ci, co, cu, cy, &c.*; and then all the combinations of the vowels with a consonant subjoined, as *ab, eb, ib, ob, ub; ac, ec, ic, oc, uc, &c.* The plan now adopted is to make them begin with simple sentences, the words being composed only of two letters. By degrees, words of three letters in easy combinations are introduced, until the children acquire facility in reading simple monosyllabic sentences. For these reading lessons, sheets pasted on board are generally used, the class being taught collectively. When the children are able to read words of one syllable, easy reading *books* may be supplied to them individually, and they may then be expected to follow each other in class, according to the order of the sentences, and to obey the instructions of the teacher without having either the words or letters specially indicated to them by the pointer.

It is almost needless to add that the successive steps in the pupil's progress must be carefully graduated. From easy words he must proceed to those which are more difficult, not necessarily from monosyllables to dissyllables, and from dissyllables to trisyllables, &c., because some

words of two or more syllables are less complicated in their form than others of one syllable; but from words which are simple in their construction to those which are irregular in their form and pronunciation. In the selection of such lessons the teacher need not trust to his own judgment. Good reading books can now be obtained almost at every School Depository, and it only appears necessary to point out to teachers the best modes in which the books can be used.

If we wish to teach children to read well and with proper expression, we cannot begin too early to make them attentive to the meaning of what they read, and with this object in view they should be allowed to read only what they are able to understand by the help of verbal explanation on the part of the teacher. To accustom them to give the proper tone and emphasis to their reading, and to divide the sentences according to their meaning and punctuation, they should from the first be required to *read as they speak*; and for this purpose should read the sentences over and over again, until they understand them thoroughly, and can read them intelligently. The teacher may easily ascertain whether the pupils understand their reading lessons, by requiring them to render what they have read into other language, and this he may easily make them do by a process of catechization. To make them read with intelligence, he may from time to time use the simultaneous method, reading himself first a whole sentence, or a clause only, and then requiring the children to read the same words with a corresponding tone, emphasis, and modulation of the voice. In using this plan, however, it is highly essential that the most perfect order should prevail in the class. Every eye should be upon the sentence, and every ear should be ready to catch the teacher's manner of reading; and when the signal has been given for the class to read the passage, every voice



should commence at the same moment, so that a perfect uniformity of utterance may be maintained. The voices should of course be as much subdued as possible, in order that unnecessary noise may be avoided. Without attention to these particulars, the simultaneous method will rarely be found to succeed. The plan is best adapted to classroom teaching.

The remarks which have been made with regard to the early reading lessons, will apply with equal force to more advanced instruction in this branch of education. It is necessary in reading any written composition to observe but *one general rule*, viz., to require such an expression of the various words, and such attention to the different stops and pauses, as shall best represent the meaning which the author intended to convey. As the pupil advances, the teacher should require him to analyze his reading lessons for the purpose of finding out the principal thoughts contained in them, and to reproduce them either by writing or recitation, so that he may acquire some experience in composition. During the progress of the reading lesson, attention must be directed to the rules of grammatical construction, to which further allusion will shortly be made.

A few words must be said with respect to the explanation which ought to accompany reading lessons. That which made the old system so thoroughly mechanical was the want of comment as the lesson proceeded. To secure the attention of the children, the teacher should be constantly offering remarks upon the different words and phrases as the *lesson* proceeds. The primary explanations should of course refer to the matter which is literally contained in the lesson, and to the meanings of words; but it is not at all desirable that the explanatory process should stop here. The passages which can actually be gone over in school must necessarily be very few and limited, and the

*direct* information contained in them must be extremely scanty. There are however few lessons in which a considerable stock of general knowledge may not be introduced, the greater portion of which would, but for this channel, most probably be altogether lost to the children. The additional information thus conveyed, should, as a matter of course, be of that kind which the passages in the lesson will most readily suggest, and such as will not impair the unity and completeness of the lesson itself. Names of persons and places, allusions to events with which the pupils are not likely to be intimately acquainted, manners and customs of the people, and other collateral circumstances bearing upon the narrative, are all more or less fit subjects for illustration and remark. There are other branches of learning inseparable from the reading lessons; among these are spelling, etymology, and grammar, upon which subjects some remarks will be offered separately.

*On Spelling.*—One of the best methods of teaching children to spell is to employ the reading lesson, and to go through all the words, both long and short, as they occur. The plan of giving columns of spelling to be learnt by heart is now generally exploded; as also is that of making the child combine succeeding syllables with those which went before in the same word; as, for instance, in the word *pronunciation*, *pro*, pro; *nun*, nun, pronun; *ci*, ci, pronunci; *a*, pronuncia; *tion*, shun, pronunciation. At the present day the child is usually required only to name the letters, marking the distinction of syllables by a pause, and at the end to pronounce the word in full.

The next essential exercise in teaching to spell is *dictation*. The teacher gives out a sentence to be written by each of the children, either on slates or books, and when it is written takes means to ascertain how far in each case the words have been correctly spelled. Dictation should

be begun early, that is to say, as soon as the children can read simple sentences, and can put together letters in writing. There is generally a great mistake in the mode of giving dictation exercises. Teachers are apt to think that the object is to make children write rapidly more than to spell with ease and correctness. Great care should therefore be taken that every necessary explanation is given before the children begin to write. For this purpose the whole sentence should first be read, that the children may understand its general bearing; then the teacher should begin the sentence, reading every word slowly, *but never more than once*, until the whole is completed. He should take care that sufficient time is given to think over the spelling of the words, though occasionally he may throw in a word of encouragement and of help in the orthography of those words which are of unusual occurrence.

In correcting dictation exercises several plans may be employed. If there is sufficient time the teacher may make a personal inspection of every boy's slate or book, and require that every misspelt word be rewritten below the original exercise; or he may have each word of the lesson spelt aloud by the boys one after another, hands being extended to show whenever a mistake has been made. To prevent concealment of errors, the children may be required to exchange slates with each other. Other plans may suggest themselves to the teacher, but in whatever method he adopts he is advised to keep the proper object of dictation lessons in view, viz., *the teaching of orthography*, and therefore to give sufficient time for the correction of mistakes.

With regard to the subject matter of dictation exercises, it will be sufficient to say, that the reading lessons will serve as the best guide. In the lower classes, simple sentences containing words which are written nearly as they are pronounced will best answer the purpose. The middle

classes may be made to write more difficult words, chiefly those whose spelling is indicated by their derivation, and sentences illustrating the rules of grammar. In the upper classes the dictation exercises may take a wider range, and may inculcate useful ideas on history, geography, &c.

It is a good plan to require the elder children to copy their corrected dictation exercises into a manuscript book ; by this means they will, in the course of a little time, provide themselves with a stock of useful knowledge written by themselves, to which they will attach some importance, as being their own work.


Another method of teaching orthography, which Mr. Sullivan in his "Outline of the Method of Teaching in National Schools" recommends, is well deserving of attention. It consists in using a text book containing, either in columns or in sentences formed for dictation, all the words in the language which are liable to be misspelled, such as—

1. Words similarly pronounced, but differently spelled.
2. Words similarly spelled, but differently pronounced and applied.
3. Words spelled and pronounced alike, but different in signification.
4. Words liable to be misspelled, either from the silence or unusual sound of one or more letters.
5. All words of unsettled orthography.
6. Practical rules for spelling.

Mr. Sullivan has himself provided a text-book entitled, "Spelling-book superseded," which is admirably adapted to the carrying out such a method as that which is above recommended.

*On Etymology.*—From the *spelling* of words we pass very naturally to their *meaning*. The plan formerly adopted for learning the meanings of words from a dictionary, or from a spelling-book in which the words were arranged

according to the number of their syllables, is now, like the old system of spelling, gradually falling into disuse. Instead of requiring children to commit long columns of unconnected words, with their meanings, to memory, they are now accustomed to learn the meanings of words by a method which leads them to classify together all words derived from the same root; and thus what was once an irksome drudgery is now regarded by them in the light of an amusement. The plan now pursued in the best schools is thus explained by the Secretary of the National Society, in the Report for 1841:—"As soon as the child knows the alphabet, as soon as he is taught to put two letters together, he is made to define, either by an example or a synonyme, or by pointing to the object, every term which these letters compose. And that it may be practicable for him to do so, his first book of instruction discards even those monosyllables which have no signification. This process *gives* interest and animation to study even from its commencement, and enables the student to advance more rapidly both in the mechanical process of reading and in the intellectual process of comprehending what is read. At a subsequent period, when this elementary instruction is completed, he is taught to divide compound words (which form the greater portion of our language) into separate roots and particles, and to give synonymes more abundantly than before, and to the full extent of which our language admits. A common example may be taken from the word *unprecedented*. An ordinary explanation of the phrase 'an *unprecedented* act,' would be, that it meant an act such as no one had done before. The child of course would understand this definition at the moment, but would probably forget it before he met with the word again. Let his attention, however, be directed to the three component particles *un*, *pre*, and *cede*; let him be asked the meaning of *un* in composition, and be required to point out other



words, such as *uncommon*, *uncivil*, in which *un* bears the same signification, 'not;' and let him be further asked for other syllables which as prefixes are synonymes with *un*, such as *in*, with its modification of *ig*, *il*, *im*, *ir*, together with *dis*, *a*, and *non*, giving examples of each; namely, *ignorant*, *illiterate*, *immortal*, *irregular*, *disjointed*, *atheist*, *nonconformist*. Let him next be interrogated as to the force of the syllable *pre* in composition; and let examples be given, such as *previous*, *premature*, *prelude*, &c. Let the syllable *cede* be next considered; and when it has been shown that *cede* signifies in general *to go*, let the signification of its various compounds be required, including *precede*, *to go before*; *proceed*, *to go forward*; *succeed*, *to go or follow after*; *accede*, *to go towards*; *recede*, *to go back*; *exceed*, *to go beyond*; *secede*, *to go away*; *intercede*, *to go between*, &c. Synonymes for each of these words may, if time permits, be demanded, and a large acquaintance with the English vocabulary be acquired at a small expense of memory. During the whole of this process instruction and entertainment are combined. While the attention is kept alive, the understanding is exercised and improved. It is not words merely, but ideas that are gained, and gained in the most agreeable manner, by tracing analogies, an employment instinctively delightful, as well as profitable to the human mind."

The exercise which is here described affords, it is hoped, a sufficient illustration of the advantages which the new method must possess over that which has hitherto been generally in use. The reader must not however imagine that such an investigation of the meaning of every word in the reading lesson need take place. It will be enough to submit a few words in each lesson (perhaps six or eight of those most suitable) to this analytical process, taking those which are least frequent in their recurrence. This is of

course on the supposition that the commoner words are well understood.

To facilitate the study of words according to their etymological meaning, many good manuals have been compiled both for the teacher and the pupil. Among the simpler books on this subject is one compiled by the Rev. A. Wilson, entitled "The Outlines of Etymology." Only the principal *prefixes*, *affixes*, and *roots* (Latin and Greek) are given; and in mentioning the English words derived from particular roots, the *verb* only is, in some cases, inserted, leaving the teacher to elicit the *nouns*, *adjectives*, and *adverbs* connected with it. The plan recommended in the preface of this little book for teaching etymology is "to give in succession the literal *meanings* of all the words derived from a particular root, making the pupil in such instance give the *word* itself; and then to reverse this process, by giving the *words*, and requiring the pupil to give both the literal and conventional *meanings*. The pupil should also be required to form short sentences with the words, in order to ascertain whether he understands them clearly, and can apply them correctly." A larger book on this subject, written by the Rev. John Hunter, has lately been published by the National Society, called "The Manual of Etymology."

*On Grammar.*—The leading principles of grammar are now generally taught, like spelling and etymology, from the reading lesson. The parts of speech with their inflection, and the rules of syntax, are allowed to receive their illustrations from the words and sentences which have been previously read. In most elementary schools grammar has hitherto been confined to the first class, and for this reason, that the definitions and rules of grammar as laid down in ordinary school books have been for the most part beyond the comprehension of younger children. It will, however,

be found that by a system of oral explanation, accompanied by familiar examples, the children almost of the lowest class may be taught to distinguish between the simple parts of speech.

At first nothing more is done than to explain the nature of a *noun* and to direct the attention of the child to instances around him. He is next led from things which he can see to others which he can only hear, though care must be taken never to trouble him with words the meaning of which is beyond his understanding. As an exercise upon the noun he is required to pick out all those parts of speech which occur in any passage he has been reading. When he has become familiar with nouns he is taught something of their inflection. The distinction of *proper* and *common*, of *gender* and *number*, are explained and illustrated, but the definition and nature of *case* is reserved until the relation of the noun to other parts of speech has been considered.

If the simple definition of a "noun being a name, &c.," is not considered sufficient, the following from the Eton Latin Grammar may be used. "A noun is the name of whatever we can speak of," and this will seldom fail in enabling a child to tell whether any word which occurs in his lesson is a *noun* or not, at least if he is acquainted with its meaning. For example, if he should call the word "inattentive" a noun, the teacher would immediately say, "Can I speak of an inattentive?" and the pupil will at once see the incorrectness of his answer. Next to the *noun* the personal *pronouns* may perhaps follow, as affording the most natural gradation, on account of their frequent substitution for *nouns*. Then may be mentioned *adjectives*, and next adjective *pronouns*. After explaining the nature of the adjective, as being employed to *qualify nouns*, the plan recommended for the nouns may also be employed here, viz., to point out all the *adjectives* as they



occur in the passage read with the nouns qualified by them. Adjective pronouns should be taught in connexion with adjectives, because they are really of the same nature. The *verb* follows next, with its distinction into *regular* and *irregular*, *transitive* and *intransitive*, its inflection by *mood*, *tense*, *number*, and *person*. In reference to the *moods* and *tenses*, the plan of using *three* only of the former (viz. the indicative, the imperative, and the infinitive), and two of the latter (viz. the present and past), is in use, as less perplexing to the children, and most in accordance with the genius of the language. In such a sentence as "*I have been commanded*," "*have*" would be accounted the principal verb, and the words "*been*" and "*commanded*" would be called perfect participles. Next to *verbs* and *participles* the children are instructed in *the adverb*, and its use in limiting and qualifying verbs, adjectives, and other adverbs. After instances have been given of more familiar application, as "*That boy reads badly*," "*His pencil is very short*," "*The swallow flies very swiftly*," examples may be selected from the reading lesson. Prepositions are next explained; first, with regard to the literal meaning of the word. What are they *placed before*? Nouns and pronouns. At this point cases may be introduced in connexion with the relation which prepositions express between nouns and pronouns. *Conjunctions* form the next subject of consideration, those words which are *most evidently* connectives being first sought for. Interjections, the last and also least important of the parts of speech, are rarely to be met with in the course of ordinary reading; it is therefore necessary to furnish examples from extraneous sources.

In connexion with the foregoing exercise, the pupil should be early accustomed to put together those parts of speech which are naturally related to each other. For example, when the noun and adjectives have been explained,

he should be asked for instances of their combination—as *a good boy, pleasant weather, &c.*; and thus will he be gradually led on to *syntax*, or *the placing together* words to form sentences. When the child has arrived at a correct knowledge of the most important parts of speech, the practice of classing them together may be dropped, and the rules of syntax may be conveyed to them through a system of *parsing*.

Before entering upon syntax it will be necessary to explain that the same word may occasionally be *a noun, an adjective, a verb*, or indeed some other part of speech, according to the position it occupies in the sentence to which it belongs. Take, for example, the word *light*. Speaking of the *light* of the sun, we evidently use the word as a *noun*, but in the sentence, “This is a *light* sovereign,” the word *light* is used to qualify the noun *sovereign*, and is therefore an *adjective*. Again, we may ask, “Did you see the man *light* the lamp?” when the word expresses action, and consequently is a *verb*. Other instances will readily suggest themselves—as the word *that*, which may be either a relative pronoun, a demonstrative pronoun, or a conjunction, according as it is placed; also the words, *bar, count, court, crop, calm, deal, desert, grave, tender, spring, stock, &c. &c.*

It may be remarked here, that, besides the ordinary parsing according to the regular order of the words, it is desirable that the pupil should be accustomed from an early period to examine the structure of sentences, that he may be enabled to compose for himself in after life as occasion may require. Among other things which he should be called upon to notice are the divisions of a *proposition* or *assertion* into its members, the *subject*, the *attribute*, and the *verb*, or, in technical language, the *subject*, the *predicate*, and the *copula*. Thus, in the assertion, “The apple is sweet,” the word *apple* is the *subject* of the

assertion; the word *sweet* that which is asserted respecting the *apple*, which is therefore called the *predicate*; and the word *is* the verb or word which makes the assertion—called also the *copula*, because it connects the subject with the attribute or predicate. In other cases, the frequent conjunction of the copula with the predicate must be pointed out, as in the sentence, “Labour fatigues,” where the verb *fatigues* contains both. The distinction of sentences into *simple* and *compound* should also be mentioned, the former being those which include but one set of the terms above referred to, as “The man walks;” the latter as those which include two or more sets of terms—for example, “The time when I shall arrive is uncertain,”—where two assertions are made, viz., that “I shall arrive,” and that “the time of my arrival is uncertain.” In carrying out this method of analyzing sentences the teacher will also be able to show his pupil the distinction between the grammatical and the logical elements of a sentence. Those who are desirous of obtaining the necessary information for such lessons are recommended to read carefully pages 23 and 24, and other parts, of Hunter’s ‘Text-Book of English Grammar,’ published by Messrs. Longman. The following lesson, it is hoped, may also afford some suggestions as to the manner in which the parsing and analysis of the structure of a sentence may be carried out in an advanced class.

---

#### LESSON ON GRAMMAR.—ANALYSIS OF A SENTENCE.

“The prince who thus mounted the throne of England was one of the greatest men of the age.”

Is the sentence *simple* or *compound*?

Why compound?

1. The prince was one of the greatest men, &c.
2. He mounted the throne of England.

What is the subject in the first clause ?

What the *verb* (or copula) ?

What the *attribute*, or predicate ?

In the second clause what is the nature of the verb ?—Transitive.

What generally follows a transitive verb ?—An object.

What is the *object* in the present instance ?

What is the *grammatical* subject to the verb *was* ?—  
The word Prince.

What is the *logical* subject ?—The phrase, “ *The prince who thus mounted the throne of England.* ”

What may the additional words be called with regard to the grammatical subject ?—*Adjuncts*.

Point out the adjuncts in the predicate.

### *Etymological and Syntactical Parsing of the Sentence.*

**The** The definite article belonging to the noun *prince*. :

*Examination.*—What is an article ? How many articles are there ? By what names are they called ? What is the meaning of *definite* ? *indefinite* ? How many forms of the indefinite article are there ?

When is *a* used, and when *an* ?

**prince** Common noun, third person, singular number, masculine gender, nominative case to the verb *was*.

*Exam.*—Define a noun. What is a proper noun ?

What a *common* ? Why is “ prince ” common ?

Define person. Why is “ prince ” the third person ?

Define number. Why is “ prince ” singular ?

What is its plural ? What is the rule for forming the plural ?

What are the exceptions ?

Define *gender* — masculine, feminine, neuter.

What is the feminine to “ prince ” ? Define case

—nominative, possessive, objective. What nouns

are nominative ? How is the possessive formed ?

How do you distinguish objectives ? Why do you

refer to the verb ?

who Relative pronoun, third person singular (to agree with its antecedent "prince," according to rule of syntax, which says "pronouns must always agree with their antecedents"), nominative case to the verb "mounted."

*Exam.*—Define a pronoun. How many kinds of pronouns are there? Why is "who" *relative*? When is *who* the nominative to the verb? If *whom* were used what would occur between the relative and the verb? Give examples of the uses of *who* and *whom*,—

The man *who* saw me.

The man *whom* I saw.

thus An adverb of manner, qualifying the verb *mounted*.

*Exam.*—Define an adverb. What are the principal classes of adverbs? Do adverbs qualify any other parts of speech? Give instances.

mounted A regular verb transitive, indicative mood, past tense, third person, singular number, agreeing with its nominative *who*.

*Exam.*—Define a verb. When is a verb regular? When irregular? When transitive? When intransitive? Define mood. How many moods are there? Name them, and explain the meanings of their name by their use. Why is *mounted* the indicative?

Define tense. How many *tenses* are there? What are the *two*? How is future time expressed?

Why is *mounted* the *past*? How do you know the number and person of a verb? Conjugate the verb *to mount* in the indicative mood, past tense.

the The definite article belonging to the noun *throne*.

throne Common noun, third person, singular number, neuter gender, objective case, governed by the transitive verb *mounted*.

*Exam.*—What other words govern the objective case? (For further examination see the word *prince*.)

- of Preposition.  
*Exam.*—Define a preposition. What is the literal meaning of the word? What are prepositions *placed before*?
- England Proper noun, third person, singular number, neuter gender, objective case, governed by the preposition *of*.  
*Exam.*—Why is it a proper noun? Are proper nouns ever made plural? When they are made plural what do they become? Give an instance, designating all persons who are called John by the phrase “*The Johns*.” What sort of noun is John?
- was Irregular intransitive verb, indicative mood, past tense, third person singular agreeing with its nominative *prince*. (See examination on the verb *mounted*.)
- one A numeral adjective, used *pronominally*.
- of A preposition.
- the The definite article.
- greatest An adjective, superlative degree, qualifying the noun *man*.  
*Exam.*—Define an adjective? How are adjectives inflected? Are they changed like nouns on account of number? Mention an adjective pronoun which is so changed. What are the rules for forming the comparison of adjectives? What adjectives are irregular? What is the positive state of the adjective *greatest*?
- men Common noun, third person, plural number, masculine gender, objective case, governed by the preposition *of*.  
 See examination on former nouns—Does *men* form its plural according to rule?
- of A preposition.
- the The definite article.
- age. Common noun, third person, singular number, neuter gender, objective case, governed by the preposition *of*.

## CHAPTER VII.

## ON WRITING.

THE ordinary method of teaching to write is by *imitation*. A copy, well written, is placed before the pupil, who is required to imitate the forms therein exhibited, and to produce, as far as he is able, a fac simile of the whole by a purely mechanical process.

In some parts of Switzerland and Germany, it was, and possibly is now, the practice to teach children to write before they learned to read, the educators in those countries attaching great importance to the strength of the faculty of imitation in young children. With us writing usually commences simultaneously with reading. At first, the children write with a pencil on slate, the pencil being inserted in a tin or steel case, to give it the length of an ordinary pen. The plan of using a short pencil without a case is most injurious to the hand-writing, on account of the cramped manner in which the hand must necessarily be held. It is difficult to teach children to hold even a long pencil well, from its want of elasticity; they are almost obliged to bend the forefinger in order to obtain sufficient force to make a distinct mark on the slate. Hence it would be extremely desirable, were it not for the additional expense, to use pen, ink, and paper from the first. In ordinary national schools however about half the children write on paper.

The mechanical plan of teaching children to write solely by imitation has been superseded in many schools by a more rational and intellectual system. The method newly introduced was the invention of M. Mulh user, of Geneva.

“The method of Mulh user consists in the decomposition of the written characters into their elements, so that they

may be presented to the child in the order of their simplicity, and that it may copy each of them separately. The synthesis, or recomposition of these elements into letters and words, is the process by which the child learns to write. The method enables the child to determine, with ease, the height, breadth, and inclination of every letter."

Although it is impossible for an ordinary national schoolmaster, on account of his multifarious duties, to carry out the method of Mulh user in all its details, yet it is most desirable that he should adopt its principles as the basis of his writing-lessons, and as far as possible instruct his pupils in the theory of calligraphy by frequent oral explanations, the practice in their copy-books being taken as a sort of examination upon the lessons they have received.

The points upon which oral instruction should be given are such as the following :—

- (a) The posture of the body.
- (b) The position of the book or slate.
- (c) The manner of holding the pen.
- (d) The rules which relate to the distances, form, inclination and height of letters in the different hands.

The following are a few of the most necessary rules :—

- 1. All letters to be equally distant from each other.
- 2. All letters (capitals and compounds excepted) to be of the same width.
- 3. All downstrokes to be uniform in thickness.
- 4. All upstrokes in small hand to be carried from the bottom of the preceding letter ; in larger hands from the middle of the letter.
- 5. Loop letters to be of the same height above the line as capitals.
- 6. Loop letters below the line (as *y, g, &c.*), to be made the same length as capitals and loop letters above the line.



7. The letter *d*, and those letters which are sometimes made without loops, to be one-third lower than capitals.
  8. The letters *t* and *p*, to be half the height of capitals.
  9. At least one-eighth of an inch to be left between words.
  10. At least three-quarters of an inch to be left between sentences.
- 

## CHAPTER VIII.

### ON TEACHING ARITHMETIC.

No person in these days will attempt to deny the usefulness of arithmetic as a science, or its importance as a mental discipline for schools. "Number," says Dr. Mayo, "presents a most important field in which to develop and strengthen the minds of children. Its obvious connexion with the circumstances surrounding them, the simplicity of its data, the clearness and certainty of its processes, the neatness and indisputable correctness of its results, adapt it, in an eminent degree, for early instruction. Arithmetical exercises tend to give clearness, activity, and tenacity to the mind: many an intellect that has not power enough for geometry, nor refinement enough for language, finds in them a department of study, on which it may labour with the invigorating consciousness of success."

The many advantages here described are however not to be realised under the old system of teaching arithmetic, which included nothing more than the mere enunciation of rules for the mechanical performance of certain operations with figures. Indeed it is only of late years that works

have appeared in which the *reasons* for the processes have been explained, and it is therefore not much to be wondered at that teachers, whose business rarely goes beyond the *using* of such educational books as are provided for them, have not given that attention to the subject which it deserves. The want of good text-books explanatory of the principles of arithmetic cannot however at the present time be urged. On this subject it will suffice to mention the names of the excellent works of De Morgan, Hunter, Hind, Colenso, &c.

To enter fully into the details of teaching any branch of national school instruction is not the object of this book. All that is aimed at is to direct attention to the broad principles of method, leaving inexperienced teachers to find their own way, after they have, as it were, been once placed in the road. With respect to the subject now under consideration, this remark must apply with greater force than almost to any other. The principles of arithmetic, as investigated in Professor De Morgan's valuable work, occupy above 200 pages of closely-printed matter; it may hence be imagined how small that portion which can be treated of in a single chapter must be as compared with the whole. A few only of the most striking points connected with teaching the principles of arithmetic can be mentioned here.

The child's first exercise in number used to be *counting*, that is, repeating the words *one, two, three, &c.*, in succession. Sometimes he was required to do this mentally, with abstract numbers only; at other times it was his task to count either his fingers or other objects which might be near him, pointing to the objects and using the words *one, two, three, &c.*, as before. Thus he was often taught to attach to some particular object the name which it received in his counting, and in this way erroneous ideas as

to the principles of number were instilled into his mind. The plan now adopted in the best infant schools is far more rational and interesting. An instrument called the Arithmeticon is generally employed; which consists of a wooden frame, traversed by twelve wires, on each of which are twelve sliding balls. Other contrivances are sometimes used, as collections of counters, beans, cubes, &c., but the Arithmeticon appears to be upon the whole most convenient for the teacher's purpose, although it might be advisable for the sake of variety to adopt occasionally other modes of illustration.

The manner in which the Arithmeticon is used may be briefly explained. The teacher moves *one ball* to some distance from the others, and pointing to it says "*one ball*;" the children repeat after him, "*one ball*." Then he moves up another to its side, using the phrase, "*two balls*," which being duly repeated, another is added, and so on up to *ten*. By a similar process he is made to count up to one hundred, which is sufficiently high for the comprehension of a very young child. To make him the more familiar with the different numbers he is frequently called upon to move the balls for himself. To give him the notion of *ordinal* as well as *cardinal* numbers, he is required to change the phrase *one ball*, *two balls*, &c., to *first ball*, *second ball*, &c.

As soon as the child can count up to ten by this method, he is ready to commence addition and subtraction. Every possible combination in which the result will not exceed ten may be introduced to his notice by means of the balls, and the reverse processes of subtraction may also to the same extent be solved before his eyes. When he has become familiar with the addition and subtraction of these numbers, he may proceed gradually to higher ones, the teacher being careful that he does not get involved in

calculations which are above his comprehension. When a question in addition has been proposed, the corresponding question in subtraction should follow. Thus after the question, How many are three and four? should follow the question, If three be taken from seven, how many remain? And if four be taken from seven, how many remain? Other combinations, besides three and four, which make seven, may also be elicited, and other subtractions which give similar remainders.

From addition and subtraction, the child may proceed to multiplication and division. Two balls being placed on one wire together, and two others on the wire below, will give an illustration of *twice two*; two more on the next wire below, *three times two*, and so on. Division may be taught by separating a collection of balls into *twos*, *threes*, *fours*, &c. As for instance, having placed four balls together, separate them into twos, then six balls into twos, then eight, and so on.

The few remarks which have been made will, it is hoped, be sufficient to show the utility of the ball frame in teaching young children the first principles of number. It would not be difficult to point out a plan by which the same, or a similar instrument, might be made available for explaining the theory of our decimal notation. For this purpose several sets of nine balls each, differing in size or colour, might represent the different denominations of units, tens, hundreds, &c., a particular set being assigned to each denomination. It may indeed be a question how far this plan may be open to the objection that it would confound rather than assist the pupil in his progress. It will perhaps be better if the child can form his figures on a slate, and thus connect the use of the Arithmeticon with a written exercise. For instance, besides adding together *two balls*, *three balls*, and *four balls*, on the frame, he

may also represent the process by the usual symbols on his slate, as—

$$\begin{array}{r} 2 \\ 3 \\ 4 \\ - \\ 9 \end{array}$$

or the teacher might exhibit the operation before the class on the black board.

When the teacher finds that the children are perfect in the addition, *on their slates*, of numbers which do not involve a result exceeding *nine*, he may cautiously begin to show them what expedients are adopted for expressing higher numbers than *nine* without additional symbols or figures.

It will be necessary to explain that all numbers above *nine* are expressed by *two* or *more* figures, the value of each being ascertained by its position. The child will have learnt from the counting on the ball-frame that the next number to *nine* is *ten*, and the teacher need only to write the number 10 upon the black board and explain that the same figure which expresses *one* represents also *ten* by being written one place further to the left, its original place when it represented *one* being in the latter case filled with a cipher. To make this plainer, the black board may be ruled in columns, and the place of units, tens, &c., marked with an initial letter, thus—

h	t	u

Having written as many numbers up to *ninety-nine* as may be necessary to impress upon the pupil the method of writing tens and units, the teacher may proceed to hundreds.

He will remind the pupil that when he came to the number ten (which consisted of *ten* times *one* unit) he required a second figure to express that number, and thence obtained the new denomination of *tens*; so that now he has arrived at the number *one hundred* (which is made up of *ten* times *ten*), he will require a third figure to express it, and he will be taught that the new column is called *hundreds*. In the same manner he will learn that the number one thousand will require an additional place, being made up of *ten* times a hundred; but as the principle will have been sufficiently illustrated by the hundreds, it may not at first be advisable to trouble him with numbers which are beyond his power of counting in the ball-frame.

The following are some exercises upon writing down numbers:—

h	t	u
2	2	2

*Examination.*—What number of apples may be expressed by the figure in the units place? *Two*. What number by the figure in the tens place? *Two tens* or *twenty*. What number by the figure in the hundreds place? *Two hundred*. What number by all the figures? *Two hundred, twenty, and two, or two hundred and twenty-two*.

h	t	u
4	7	0

What is the value of the 4? *Four hundred*. Of the 7? *Seventy*. Are there any units? *No*. Read the whole numbers. *Four hundred and seventy*.

Change places with the 7 and 0, what number will be expressed? *Four hundred and seven*.

2	3	4	5
---	---	---	---

How many tens are there? How many hundreds? units? thousands? Write down the value of the 3, 300; of the 2, 2000; of the 5? of the 2 and 4, 2040; of the 3 and 5, 305; of the 2 and 5, 2005, &c. &c.

In connection with these exercises, the rule of addition may be practised and explained as below.

4	0	7
2	5	5
6	9	6

The numbers should be considered as representing objects with which the children are familiar, as nuts or apples, and should first be read thus,—

Four hundred and seven nuts.

Twenty-five nuts.

Six hundred and ninety-six nuts.

Then beginning with the units. *Six nuts and five nuts are eleven nuts. Eleven nuts and seven nuts are eighteen nuts.* Now as we have no single figure to represent eighteen, we must resolve that number into tens and units. How many are there? *One ten and eight units.* Set down the *eight units* in the units place, and add on the ten to the line of tens. Finding that the line of tens with the *one ten* carried from the units amounts to *twelve*, we require a similar division of the tens into hundreds and tens. How many? *One hundred and two tens equal twelve tens.* Therefore set down *two tens* and carry on the one hundred to the column of hundreds; adding the hundreds and resolving into thousands we produce as a final result 1128. The child might then be required to name the separate numbers of which the amount has been composed; and other questions may also be proposed to him in the way of examination.

In time the ruled lines may be dispensed with, and the pupil taught to keep the figures in their places by the eye.

The uses of the cipher to fill up vacant columns will now be better understood, especially after the child has learnt the inconvenience of misplacing numbers through its omission. With the Rule of Addition should be introduced the algebraical sign connected with it, + or *plus*, as it will be found of the greatest importance in conveying a knowledge of principles upon which our notation is founded. Thus numbers may be represented using the sign *plus* in the following manner:  $65 = 60 + 5$ ;  $479 = 400 + 70 + 9$ ;  $63 = 50 + 13$ ;  $519 = 400 + 110 + 9$ , or  $500 + 10 + 9$ .

From *Addition* the pupil will proceed to *Subtraction*, which presents no difficulty of explanation except upon the subject of borrowing when a figure in the *subtrahend*, the number to be subtracted, happens to exceed that which occurs in the same denomination of the *minuend*, or number to be diminished by subtraction, as in the following example:—

From 364 apples,  
Take 147 apples.

The ordinary method by which the subtraction is performed in such cases is founded upon the axiom that an equal number may be added to the minuend and subtrahend without altering the arithmetical ratio existing between them. To give a simple instance. The difference between 5 and 2 is 3. Add 2 to each number, making 7 and 4, and the difference is the same, thus,—

$$5 - 2 = 3, \text{ and } (5 + 2) - (2 + 2) = 3.$$

Applying the principle to the example above given, we shall change the numbers thus, by adding ten to each:—

	Hundreds.	Tens.	Units.	
From	3	6	$10^2 + 4$	or $300 + 60 + 14$
Take	1	$4 + 1$	7	or $100 + 50 + 7$
	2	1	7	$200 + 10 + 7$



It will be observed that *ten* has been added to the upper number in the place of units, and one ten to the lower number in the place of tens, thus preserving the arithmetical ratio by the addition of an equal number to each. But instead of the subtraction of 147 apples from 364 apples, that which has really been performed is the subtraction of  $157 - (100 + 50 + 7)$  from  $374 - (300 + 60 + 14)$ , which, however, will clearly produce a correct result.

The subtraction of the real numbers may however be performed by a method which is to be preferred on account of its greater simplicity of demonstration. The pupil who has been accustomed to resolve numbers into their equivalents will readily understand the following process, by which the example above given may be solved by using only the original numbers:—

	Hundreds.	Tens.	Units.	
364 =	3	5	14	or $300 + 50 + 14$
147 =	1	4	7	or $100 + 40 + 7$
Difference	2	1	7	or $200 + 10 + 7$

Here, instead of ten being added to each number, the form only of the minuend is altered by transferring one ten to the place of units, while the exact original value is retained.

This method is sometimes objected to on account of the confusion which it is imagined may arise from ciphers occurring in the minuend; but when children have from the first been accustomed to it no inconvenience need be apprehended; only let correct principles be taught, and rules for meeting difficulties which may occur in the details of operation will almost suggest themselves.

The following example will show the manner in which the matter of subtraction may be treated when the minuend contains ciphers:—

From 40000,  
Take 24698.

Here, for the sake of plainness, we will make use of the lines for columns, and the equivalents of the minuend shall be placed one above the other.

	Tens of Thousands. Thousands. Hundreds. Tens. Units.					
<i>e</i>	3	9	9	9	10	
<i>d</i>	3	9	9	10	0	
<i>c</i>	3	9	10	0	0	
<i>b</i>	3	10	0	0	0	
<i>a</i>	4	0	0	0	0	<i>Minuend.</i>
	2	4	6	9	8	<i>Subtrahend.</i>
	1	5	3	0	2	<i>Remainder.</i>

Here the original minuend is marked *a*, and it will be seen that  $a = b = c = d = e$  and the subtraction actually performed has been with the minuend in the form of *e*.

It is not to be supposed that a person subtracting need bear in mind the principles in every operation he has to perform; it will be sufficient for him to have adopted a rule which is based upon principles which he does understand, and which he can enunciate if required to do so. Let us see how the example would be performed by a person practised in subtraction according to both methods.

From 40000

Take 24698

Remains 15302.

Work of first method:—

Eight from ten, two remain; ten from ten, nothing; seven from ten, three; five from ten, five; three from four, one.

Work of second method:

Eight from ten, *two*; nine from nine, *nothing*; six from nine, *three*; four from nine, *five*; two from three, one.

It will be for the reader to judge whether the latter method is more confused than the former.

In explaining Multiplication and Division, the teacher must have recourse to the system of separation recommended for the former rules. Multiplication is an abbreviated form of Addition, as Division is of Subtraction.

Let a simple example be given of each; ( $4 \times 6$ ), or 4 times 6, is the same as  $6+6+6+6=24$ ;  $24 \div 6=4$ , or 24 divided by 6 = 4, shows that 6 can be subtracted 4 times from 24, when nothing will remain, thus—

$$\begin{array}{r}
 24 \\
 6 \\
 \hline
 18 \\
 6 \\
 \hline
 12 \\
 6 \\
 \hline
 6 \\
 6 \\
 \hline
 . \\
 \hline
 \end{array}$$

In multiplication the child should, from the first, be taught the meaning of the terms used—as *Multiplicand*, *Multiplier*, *Product*, *Factor*; and the same remarks will apply also to the terms *Divisor*, *Dividend*, *Quotient*, *Remainder*, used in Division. Short Multiplication and Division are extremely simple, and may be easily explained to children upon the principles of Notation and Numeration already laid down. A few words with examples must suffice with regard to the rules for Long Multiplication and Division.

The reason for placing the result of each succeeding

multiplication one figure to the left, will appear from the working of the following example:—

Multiply 26095 by 234.

The multiplier 234 resolved into  $200 + 30 + 4$ .

$$\begin{array}{r}
 26095 \\
 234 \\
 \hline
 104380 = 26095 \times 4 \\
 782850 = \quad \quad \times 30 \\
 5219000 = \quad \quad \times 200 \\
 \hline
 6106230 = \quad \quad \times 234 \\
 \hline
 \end{array}$$

Now, as the crossed ciphers to the right of the second and third products will not affect the addition, it will be as well, for the sake of saving trouble, to omit writing them, provided we can keep the other figures in their proper places.

The principle of Long Division may be exhibited by a short example:—

27) 164997 (6000 + 100 + 10 + 1 or 6111.

$$\begin{array}{r}
 162 \overline{) 000} \\
 \underline{29} 97 \\
 27 \overline{) 00} \\
 \underline{29} 7 \\
 27 \overline{) 0} \\
 \underline{27} \\
 27 \\
 \underline{27} \\
 \dots
 \end{array}$$

Here will be seen what is really done, and what figures are omitted to make the operation more expeditious.

The remarks which have been made refer to teaching

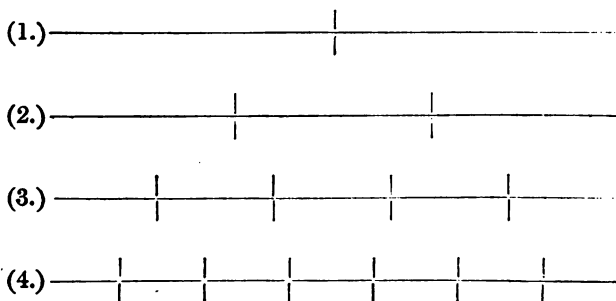
the *principles* of Arithmetic ; but it is not on this account to be inferred that the *practice* is to be omitted. After one or two easy examples, illustrating the principles of any rule, have been worked, the pupils should be required to practise to themselves upon their slates until they are able thoroughly to comprehend the reasons of the rule, and to solve questions upon it with facility. They may either practise in class, all working the same example, or each child may have a book to himself, and work separately from the rest. It is advisable, perhaps, to combine these plans ; in the advanced classes the latter, and in the lower classes the former, may best predominate.

In connexion with the simple rules the corresponding commercial or compound rules should be commenced. Thus easy sums in the addition of money should be given by turns with the abstract numbers and simple objects, and so also with regard to the other simple rules. This is the more important, because children in some places leave school before they have had time to reach the compound rules, unless those rules have been combined with the simpler operations. The difficulty of explaining first principles cannot be urged in favour of the separation of these two sets of rules, because children generally are better able to understand any reasoning upon the familiar subject of *money* than upon abstract calculations. With regard to the examples selected for the pupil's practice, it may be remarked that questions bearing upon his circumstances in life, or upon matters with which he is well acquainted, are more appropriate than those which refer only to abstract numbers. In agricultural districts the child will be most familiar with the labours of the husbandman, the prices of corn, potatoes, &c., and upon such subjects, therefore, should his arithmetical exercises be chiefly formed ; while in manufacturing localities the operations of the artisan, the results of machinery, and other like topics, will

afford the more useful, as well as the more interesting, examples.

From whole numbers the pupil may proceed to the subject of Fractional Arithmetic; but here neither the ball-frame nor collections of counters, cubes, &c., will be available for explaining the principles upon which the rules are based. Some other mode of illustration must therefore be adopted; and the following is one which the writer has often employed with success:—

Let several lines of equal length be drawn upon the slate or blackboard, and let the first be divided into two equal parts, the second into three, the third into five, &c., by compasses before the pupil's eyes. Let the lines be placed over each other, that their equality may be easily seen, and that all the lines may be supposed to represent the same unit or whole. Thus—



With the aid of such lines as these, it will be easy for the teacher to convey to the minds of his pupils clear ideas on most of the principles of Fractional Arithmetic. It will of course be necessary for him first to explain the simple definition of a *fraction*; although it will not perhaps be advisable at this early stage of the subject to show how fractions are expressed, or to burden him with the

terms *numerator*, *denominator*, *proper*, or *improper*, *compound*, *complex*, &c. It is important that the lines should be equally divided; and for this reason, a pair of the large wooden compasses used for the black-board should be at the teacher's command.

Commencing with the line marked (1), the pupil should be told that each of the parts into which the line has been divided is called *one second*, or *one-half*, and he will of course easily perceive that the two parts together make up the whole line. In the second line each part will be called *a third*; and questions should be put in Addition and Subtraction, as the following:—How many thirds make up the whole line? How many are two-thirds and one-third? What part of the line will remain after cutting off one-third? What part, after cutting off two-thirds?

*Fourths* will be taught from the first line, by subdividing the *halves*; and palpable proof will be offered to the pupil by the compasses. A new principle will now be derived, that *one-half* is equal to *two-fourths*; and various exercises will follow, as in the former instances.

When the divisions are thoroughly understood, the teacher may proceed to the other lines. If it is considered necessary to attach the idea of some particular unit to the line, it might be made exactly *one foot* in length, and the parts would be respectively called, one-half of a *foot*, one-third of a *foot*, &c. This phraseology may be further illustrated by such questions as the following:—A shilling may be divided into twelve equal parts, called pence: What fraction is one penny of a shilling? and other exercises of a similar nature.

The next step will be to establish in the mind of the pupil the comparison of parts which are not in themselves commensurate, like *fourths* and *seconds*, *sixths* and *thirds*, &c. *Fourths* cannot be divided into an equal number of *thirds*, and the child will not at first be so familiar with

the fact that *one-fourth is less than one-third*, as he is with regard to their reciprocals, that *four is greater than three*. Here then it will be necessary to adopt the subdivision of the line of thirds and fourths into twelfths, whereby it will be easily shown that *one-fourth* which is composed of *three-twelfths*, must be less than *one-third* which is made up of *four-twelfths*. When several examples of this kind have been investigated, and the child is able to perform readily any operations of addition and subtraction in connexion with the lines, he may be taught the arithmetical method of expressing fractions, or in other words that the *denominator* is written under the *numerator*, with a horizontal line between the two. The meaning of these terms may be illustrated from the lines, thus: calling upon the learner to name some fraction—for instance, *two-fifths*—he would be told by a reference to the line of fifths that the fraction belonged to the *denomination* of *fifths*, pointing out the same upon the line of fifths, and that the figure 5 would therefore represent its *denominator* (that which indicates the denomination). This being written down and a short line drawn over it, the fraction will be completed by placing the figure 2 above, which is called the *numerator*, because it *numbers* the value of the fraction. It is important that the pupil should not be confused with the terms *numerator* and *denominator*. Let him be told that the latter only represents the *kind* of fraction, whether *fourths*, *fifths*, &c., similarly to the signs £ s. d., which placed over (instead of under) numbers, denote that they are to be considered as pounds, shillings, and pence. To make him familiar with fractional expressions, easy exercises like the following may be first used  $\frac{1}{3} + \frac{2}{3} = \frac{3}{3}$ ,  $\frac{1}{3} + \frac{2}{3} - \frac{2}{3} = \frac{1}{3}$ , &c. The pupil should then be required to point out, and also to write down, fractions having the same numerators but different denominators, and others having like denominators but unlike numerators,



from which exercises the following results may be deduced :—

1. Of two fractions having the same numerators, the greater is that which has the lesser denominator.

2. Of two fractions having the same denominator, the greater is that which has the greater numerator.

The judgment of the instructor will be the best guide as to the length of time during which any of the exercises which have been mentioned should be continued, and also when the pupil should be required to consider fractions without reference to a line or any other particular unit. The rules for the conversion of Fractions by Reduction—those also for Addition, Subtraction, &c., of Fractions—must all be carefully gone through, and the principles explained, if necessary, by reference to the lines.

Whether the Rule of Three should be taught before or after Fractions, is a matter which it is scarcely necessary to discuss here. Writers on arithmetic generally place this rule immediately after Reduction and the compound rules, because its great usefulness in operations of a commercial nature makes it desirable that children should acquire some knowledge of it as early as possible. The principles of Ratio and Proportion may, no doubt, be more clearly explained by a reference to Fractions, and it may therefore be advisable to give the pupil some general ideas upon the subject. This may be done without entering into every particular connected with the rules for fractional quantities. The following lesson on the Rule of Three supposes a previous acquaintance with the nature of a fraction.

---

## LESSON ON THE RULE OF THREE.

*Preliminary.*

Ratio is the relation which one quantity bears to another *of the same kind*, in respect to magnitude.

We can speak, for instance, of the ratio or relation between two sums of money, as 5 shillings and 50 shillings, 6 miles and 4 miles, 50 days and 9 days. But we cannot institute a comparison between things of a different kind, and therefore no relation or ratio can be said to exist between 5 days and 6 shillings, or 9 yards and 15 pence.

One way of comparing two numbers, or of discovering their ratio, is to consider *what part* one is of the other: thus, What part is 4 shillings of 5 shillings? The part may be expressed by the fraction  $\frac{4}{5}$ , and this fraction therefore expresses the ratio of 4 to 5.

But the usual method of expressing ratio is by the sign ( $:$ ) placed between the numbers. Thus 4 : 5 is the ratio of 4 to 5.

What do you understand by the term proportion?

The equality of ratios.

The ratio of 4 to 5 was expressed by the fraction  $\frac{4}{5}$ . Mention another ratio which is equal to it; or, which is the same question, name a fraction equal to  $\frac{4}{5}$ .

Say  $\frac{8}{10}$ . What ratio does  $\frac{8}{10}$  express?

How might the equality of these two ratios be expressed fractionally?

$\frac{4}{5} = \frac{8}{10}$ . What sign here expresses the equality?

Ans. The sign = .

Now what is the usual form of expression?

Ans. 4 : 5 :: 8 : 10.

Point out the sign which expresses the equality?

Ans. ::

What other sign is this equal in effect to?

Ans. =

What is the expression ( $4 : 5 :: 8 : 10$ ) called?

*Ans.* A proportion.

What names are given to certain terms composing a proportion?

*Ans.* *Extremes* and *means*, *similar* and *dissimilar*.

(*Explain which are extremes and which means.*)

What relation exists between these extremes and means?

*Ans.* The product of the extremes is equal to the product of the means.

What rule are we able to deduce from knowing the equality of these products?

*Ans.* A rule for finding one term which may happen to be unknown.

The term missing must be either one of the extremes or one of the means—so that two extremes or two of the means must be known. It is therefore obvious that, by multiplying together the two *similar* terms and dividing the product by the one *dissimilar* term, the missing term must be found.

Thus, in the above proportion,  $4 : 5 :: 8 : 10$ . If the 10 were missing, multiply the similar terms (two means) 5 and 8 and divide by the one dissimilar term 4.

$$5 \times 8 = 40 \quad 40 \div 4 = 10. \quad \text{Or,}$$

$$\frac{5 \times 8}{4} = 10$$

The *Rule of Three* is so called because *three terms* are given from which the fourth term of the proportion has to be deduced. In arranging the known terms from the question, it is customary to fill up the first three places of the proportion, and to find the fourth term according to the principles above enunciated, as in the following example:—

If a servant's wages for one year amount to 9*l.* 10*s.*, what ought he to receive for 21 days?

Here it will be seen that the servant's wages for one year

must have the same ratio to his wages for 25 days as one year has to 365 days. The equality of these ratios may be thus expressed—

1 year or 365 days : 25 :: 9*l.* 10*s.* : the unknown wages.

Which may be worked out as in the previous example.

In ordinary practice it is advisable, when stating a Rule of Three sum, to consider first which of the given terms is of the same kind as the fourth or required quantity; and to place this term at once in the term which the third quantity is intended to occupy. Thus in the above example, as the answer to be obtained must be a certain amount of money, the known sum of money must occupy the third term; as thus—

: : 9*l.* 10*s.*

Next, consider whether the answer must be more or less than 9*l.* 10*s.* It will be less, because the servant's wages will be less for 25 days than for 365 days. Put therefore the smaller number in the second term; thus,—

: 25 :: 9*l.* 10*s.* ;

and the remaining term, 365 days, will occupy the place of the first term, as in the statement above given.

The practice of *Mental Arithmetic* is of too great importance to be passed over without a few suggestions as to the manner of teaching it. In pursuing this subject the rules used for Slate Arithmetic should be used as much as possible, in order that the one branch may the more readily assist the other. But it may be remarked that, in neither department, should the pupil be required to work any particular exercise according to one undeviating rule.

The application of the general principles of numbers should be left in a great measure to the teacher's own judgment. It is of course essential that the best processes with which he is acquainted should be exhibited to the

pupil, but it is not at all necessary that the lesson should be restricted to these only; on the contrary, each child in the class should be allowed to work any given sum according to his own way; when each separate task has been completed the teacher should show on the blackboard, the best and neatest solution to the whole class. To give an easy illustration, suppose the following question were proposed: If 153 pairs of shoes cost 51*l.*, what is the price of a single pair?

Here some of the children would probably set about working the sum by the Rule of Compound Division, reducing pounds to shillings, dividing and then bringing the remainder to pence, and so on. Others might view it as a Rule of Three sum, and proceed accordingly. There may possibly be some in the class who see at once that 153 is a multiple of 51, inasmuch as it contains 51 exactly three times; that therefore three pairs of shoes may be obtained for a pound, and so that the price of a pair must be the third of a pound or 6 shillings and 8 pence.

Generally speaking, the great difficulty which presents itself in mental calculations is the retention of those parts of the operation in which the mind is not immediately engaged. It is therefore necessary that, in the construction of rules for Mental Arithmetic, this difficulty should be kept in view. To take a simple example,—

Add together 47 and 39.

If we set about adding in the ordinary way, *nine* and *seven* are *sixteen*, *six units* and carry on *one ten*, it will be seen that during this process the *two* figures of *tens*, besides the figure carried, have to be kept in mind. But let the following plan be pursued and a comparatively small effort of memory will be required. *Add the whole of one number to the tens of the other at once, and afterwards add the remaining units; thus, 47 and 30 are 77, 77 and 9 are 86.*

About twenty minutes a day is sufficient time to devote to Mental Arithmetic.

The rules should follow in the usual order. First easy additions, then subtractions, and next the multiplication table, which may be entirely learnt through mental exercises. The tables for shillings, pence, and farthings, should be connected with the lines of multiplication when the pupil is advanced to Division; thus, *seven times two are fourteen; fourteen farthings are three pence half-penny; fourteen pence are one and two pence*, and so on. The farthings should be discontinued when the number exceeds 48. The rules for calculating prices should be learnt from books as home lessons, or they may be communicated orally by the teacher.

Taking places in arithmetic should be allowed when the whole class is engaged in the same calculations; but occasionally the children should be permitted to work sums individually, either from cards or from their own small books of examples.

In the majority of elementary schools it is not found practicable to advance beyond Fractions and the Rule of Three; and in some rural schools it is often necessary to fix a much lower limit than this, the majority of children stopping short of the higher compound rules, and scarcely acquiring sufficient arithmetical knowledge to construct an ordinary Bill of Parcels or commercial account. In a few town schools the application of arithmetic to mensuration and mechanics and a little elementary Algebra have been attempted. In regard to these subjects, however, it has been found extremely difficult to habituate young children to the mathematical reasoning necessary for a proper comprehension of these subjects. A collection of rules may of course be easily taught, but these, without the principles upon which they are based, would be soon forgotten. There can however be no question that these last-mentioned higher

branches of instruction will be found very useful to those who may afterwards become engaged in mechanical pursuits. On the subject of mensuration, a small work by the Rev. N. N. Griffin, and on mechanics a similar work by the Rev. R. Fowler (both published by the National Society), have been specially compiled for the use of elementary schools.

---

---

## CHAPTER IX.

### ON TEACHING GEOGRAPHY.

Of all subjects of instruction there is none probably which presents a wider field for the teacher than that of Geography. Taking the ordinary definition of the word, we may form some idea of the comprehensiveness of this science, for what may not a "description of the earth" be supposed to include? It is however desirable that the study of geography should be kept within certain limits, and confined to those subjects which are immediately suggested by a consideration of the *earth's surface*. Among these subjects may be mentioned, the figure and magnitude of the earth, latitude and longitude, which determine the relative position of the different points on the surface, and the mode of representing the surface by artificial globes and maps. The department of Geographical Science, in which these and similar subjects are considered, is called *Mathematical Geography*, because the aid of mathematical reasoning is required for their investigation. Next may be named those parts of the science which belong to *Physical Geography*, such as involve a consideration of the natural features of the earth's surface, according to its division of land and water. One

other branch yet remains to be mentioned, viz, *Political Geography*, which treats of the globe according to the divisions and other peculiarities which exist upon it in relation to the different nations, tribes, and societies of men, among whom its surface has been artificially divided.

The first lessons given to children in geography should be of a preparatory nature. Instead of taking the whole globe at first, and dividing it into hemispheres, continents, islands, peninsulas, &c., according to the plan formerly pursued, let the child become acquainted with the geography, or rather topography, of the immediate neighbourhood in which he lives. If he live in a town let his attention be directed to the streets, squares, and public edifices; if in the country, to the woods, fields, &c., with which he may be acquainted. Next let him be directed to observe whether the neighbourhood is hilly or level, what trees and plants are peculiar to the locality; the rivers, streams, and ponds which are near; and what are the industrial pursuits of the inhabitants. He will thus acquire correct ideas of what geography is intended to teach, and will be the better prepared to enter upon a comprehensive study of the subject. In connexion with these preliminary exercises, the various boundaries, and other points which admit of illustration, should be sketched with chalk upon the blackboard, as an introduction to the proper understanding of the nature and uses of *maps*.

Mr. Sullivan, in his instructive article on teaching Geography, recommends a course of previous preparation, and enters very fully into the method of carrying it out. "First, the pupils (he says) should be made acquainted with the four cardinal points, and this is to be done by making them observe the position of the sun at twelve o'clock. Let them look towards the sun at that time, and their faces will be in the direction of the *south*, their backs



will be towards the *north*, their right sides towards the *west*, and their left sides towards the *east*.

“When they are quite familiar with these particulars out of doors, they should be required to consider the positions of the various parts of the school-room *inside*; as, for example, the walls, doors, windows, &c. Next the questions should be extended to the school premises and the streets bounding them; and from these to whatever may happen to lie beyond, until the pupil is gradually carried out of the limits of his own experience, and is led to the correct appreciation of geography as an abstract science.” \*

When the children have been thus prepared for the study of general geography it will be time to place before them a map of their own country. At the outset the teacher should be careful to impart correct notions as to the construction and objects of the map itself—such, for instance, as the bearing of the different parts with regard to the points of the compass; the portions which are designed to represent land and water; the marks also which depict mountains, rivers, coast lines, &c.

With regard to the order in which the various parts of the subject should be taught, Mr. Hughes has the following remarks:—“We must first indicate the great and general features which form, as it were, the outline of the earth’s surface, and afterwards proceed to fill up the picture in such detail as the opportunities of time and the means at our disposal will admit of. The first, and indeed the *chief* aim, should be to make the learner thoroughly acquainted with the *natural* condition of the surface of the globe, or, in other words, with the great outlines of *physical geography*. Highlands and lowlands, mountains and valleys, deserts and fertile plains, seas, lakes, and rivers, are the most important elements of geography, and it is

\* Sullivan’s Geography.

from them that almost all other geographical knowledge is to be deduced." \*

From a consideration of the physical features of the country we may proceed to a survey of its political circumstances or statistics, which include the smaller divisions, as provinces, states, departments, or countries, the various towns and other principal localities, the population, religion, customs, and industrial pursuits of the people. In teaching these particulars the chief point to be attended to is a systematic arrangement of the various details, so that they may become thoroughly fixed in the minds of the pupils. For this purpose they should be arranged as nearly as possible in reference to their geographical situation. The divisions of the country may be taken according to their position with regard to the cardinal points—as the *northern*, the *southern*, the *eastern*, the *western*, and the *central or midland* divisions. The seaports may be mentioned in the order of their succession along the line of coast, and the inland towns as they stand upon certain rivers or have some other peculiarity of situation. A similar plan may be observed in teaching the *physical* features, when it becomes necessary to mention them by name:—thus, the boundary seas and channels; the gulfs, bays, rivers; also the capes, islands, &c. (each class being taken separately), may be taught as they occur in passing round the coast. The memory should not at first be overburdened with *names*, especially with *useless* names; and indeed, for physical geography, it appears scarcely necessary at the outset to use names at all. We may speak of the seas, gulfs, &c. on the *north coast* or on the *east*, &c., of the rivers which rise in the interior and flow in a certain direction, of the mountain chains which run from the north to the south, and so on. When however it becomes requi-

\* Remarks on teaching Geography, by W. Hughes.

site to identify any particular features of a country by their names, it is very desirable to connect with them some historical fact, or to mention some peculiarity derived from their situation or general circumstances which may be likely to impress them the more vividly on the mind. Great assistance in fixing the names of different localities may be derived from the practice of *map-drawing*, if it can be pursued without a too great infringement upon the master's time and superintendence, and without the loss of more important instruction to the children.

Of the *mathematical* parts of geography little can be given to the junior classes beyond the simplest explanations as to the form of the globe, because the subjects connected with this department of the science require a higher development of the reasoning faculties than can be expected in young children; but to the advanced pupils instruction may be imparted upon these points by the aid of an artificial globe. The kind of globe most useful for the purpose is one perfectly plain and free from names, and painted black, so that lines may be drawn upon its surface with prepared chalk. It should be mounted in a stand similar to the ordinary terrestrial globe.

As a preliminary step it is essential that the simple mathematical definitions should be taught—viz., such as refer to right and curved lines, angles, circles, ellipses, squares, cubes, &c.; and instruction upon these points may be given even to the younger pupils by a course of *linear drawing*, and by other lessons on the delineation of form, as a preparation for their after studies in mathematical geography.

After the necessary information with regard to the form and magnitude of the earth, and its motion upon its axis, has been given, the teacher may proceed to explain the methods for determining the relative positions of different points on the earth's surface. Drawing first a *great circle*

upon the globe, he will define it as *a circle whose plane passes through the centre of the globe*, or as *one which will divide the surface of the globe into two equal portions*. Correct definitions are most important; therefore let him take care that the children understand what is meant by the *plane* of the circle. If the globe could be actually divided into two equal parts its plane could be shown; but as it cannot be so divided, the teacher may draw a circle on the floor which may be made to represent the plane of that circle. The definition of a *lesser circle* will of course be the reverse of that which has been given for the *great circle*.

When both these classes of circles are quite understood, with all that pertains to them, such as diameters, radii, semicircles, arcs, &c., the pupil will be ready to receive instruction upon the different circles which are actually drawn upon the artificial globe, and which are known by the names *equator* or *equinoctial line*, *ecliptic*, *parallels of latitude*, and *meridians of longitude*—the teacher drawing them, one after the other, in chalk. Of the *equator* it may be said that it is a *great circle whose plane is perpendicular to the axis of the earth*, or it may be defined as a *great circle every part of which is equi-distant from the extremities of the earth's axis, or the poles*. It will not be advisable to speak particularly of the *ecliptic* until the pupil has acquired some knowledge of the earth's position with regard to the sun and the fixed stars; and the teacher will therefore pass on to the circles which are used for determining the latitude and longitude of places. Here again it may be remarked that accurate definitions should be given. A parallel of latitude, excluding the equator, may be defined as

*A lesser circle, whose plane is perpendicular to the axis of the earth, and parallel to the plane of the equator.*

A meridian may be defined as

*A great circle, which passes through the poles, and whose plane is at right angles to the equator.*

When these are quite understood, and no confusion arises in the mind of the pupil as to which are the meridians and which the parallels—a result which is to be obtained by giving him sufficient practice in describing both kinds with his own hands upon the black globe, and noticing the points of intersection, the uses of parallels and meridians in finding the *latitude* and *longitude* of a place may be introduced. After explaining the simple and literal meaning of these latter terms, a small spot should be marked upon the globe, and the pupil can then be shown the method of finding the latitude and longitude of this point. The necessary circles having been drawn through the spot, a correct notion of the nature of latitude and longitude will be obtained, and the following definitions may be deduced.

*The latitude of a place is the arc of the meridian intercepted between the place and the equator.*

*The longitude of a place is the arc of the equator intercepted between the meridian and another meridian called the FIRST meridian.*

By a similar inductive process the pupil may be carried on to the more advanced parts of Mathematical Geography, and may by degrees receive effective instruction upon points which might appear at first sight almost beyond his comprehension. In this place, however, it is quite impossible to pursue the subject further.

In arranging the notes of a lesson on Geography, the following method has been found to possess advantages:

- I. Ancient and modern names of the country.
- II. Position, boundaries, and geographical figure.
- III. Extent.

**IV. Natural features, as—**

- (1.) With regard to the water.
- (2.)       "               "       land.
- (3.) Climate.
- (4.) Soil.
- (5.) Productions, as—
  - (a) Animal.
  - (b) Vegetable.
  - (c) Mineral.

**V. Political and ecclesiastical divisions, and chief towns.****VI. Statistics of the country, including population, religion, language, education, government, pursuits of the inhabitants as affected by the position (maritime or inland) and by the productions of the country, places classified according to the industrial pursuits of the people.**

Applying this method to the compilation of Notes on the Geography of England, the subjoined result has been obtained :—

*England.***I. Roman name, Britannia; Saxon and modern, England.**

**II. N.W. of Europe. South E. portion of the island of Great Britain.** Between the 49th and 56th parallels of N. latitude, and between the 2nd meridian of E. and the 6th meridian of W. longitude. Bounded on the N. by Scotland, E. by the German Ocean, S. by the English Channel, W. by the Atlantic Ocean, the Bristol Channel, Wales, and the Irish Sea. Nearly surrounded by water, and therefore a peninsula.

**III. Mean length, 360 miles; average breadth, 220. Contains 37 millions square miles.**

- IV. (1.) Neighbouring seas, gulfs, bays, estuaries, straits, rivers, lakes.

*All these to be named in the order which has been suggested.*

- (2.) Mountains, plains, valleys, headlands.
- (3.) Temperate. More free from extremes than that of any large country in the globe within the temperate zones.
- (4.) General character of the soil indifferent; the original forests have however nearly disappeared, and three-fifths at least of the surface has been rendered by the labour of the people fairly productive.
- (5.) (a) Wild animals, of which many kinds (it would appear) originally inhabited the country, have now almost entirely disappeared. Name domesticated animals, birds, fishes, reptiles.
- (b) The native vegetation of the country is not extensive. Most of the fruits, trees, shrubs, roots, &c., are exotics, which by a long course of culture have become naturalized.  
Mention by name, the fruit-trees, bread-corns, vegetables, roots, timber-trees, ornamental shrubs.
- (c) Coal, iron, copper, tin, lead, salt, zinc, silver, slate, limestone.

- V. It is divided into forty counties. Classify and name them with their capitals and chief towns. Circuits for the administration of justice. *Ecclesiastical*—Provinces, dioceses, archdeaconries, deaneries, parishes.

- VI. Population, nearly 17 millions. Government, a

limited monarchy. Religion, a branch of the Church Catholic, protesting against the pretended claims of the Church of Rome to supremacy. Education—Voluntary local efforts, aided by religious societies, and by a committee appointed to dispense the sums voted by parliament.

The pursuits of the people are agricultural, manufacturing, and commercial. The position of England, with regard to the other land on the globe, the length of its coast line, and its numerous harbours, adapt it in a peculiar manner to commercial purposes.

Name the chief seats of the different manufactures.

In the foregoing notes, the *names* of divisions, places, &c., both physical and political, have to a great extent been omitted—it being supposed that a teacher should acquaint himself with these particulars before giving his lesson, and without the aid of writing. Many points have been inserted in the notes, which it would be unadvisable to give in connexion with a geographical lesson except to the most advanced classes.

---

## CHAPTER X.

ON HISTORY, NATURAL PHILOSOPHY, DRAWING, AND  
VOCAL MUSIC.

BESIDES the subjects which have been already referred to, there are a few others which, on account of their practical usefulness and their general bearing upon the probable



pursuits of the pupil's after-life, ought to receive a certain amount of attention in Elementary Schools. Among these may be mentioned History, the Elements of Natural Philosophy, Linear Drawing, and Vocal Music.

*History* must be taught chiefly in connexion with the reading lessons. In the absence of any reading-book upon the subject of *Universal History*, the teacher may give a brief outline of the chief events in the history of the world as a supplement to his lessons on Sacred History. For this purpose a division may be made of Universal and Sacred History into three great periods, all nearly equal.

1st period—From Adam to Abraham.

2nd period—From Abraham to Christ.

3rd period—From Christ to the present time.

In the sacred history of the first period, the dispersion of mankind after the Deluge will lead to a consideration of the foundation of empires, and the invention of the most necessary arts. In that of the second period an examination of the great nations of antiquity will be suggested. The history of ancient Egypt is naturally connected with that of Joseph and Moses; Assyria and Babylon, with that of the kings of Israel and Judah, and the captivities. The return of the Jews from Babylon leads to a mention of Cyrus and the Persians, and their more recent history up to the birth of Christ includes that of the Greeks and Romans. The third period commences with the birth of our Blessed Saviour, and comprises, besides the subsequent events recorded in Scripture, the destruction of Jerusalem, the dispersion of the Jews, the early persecutions of the Christians, the conversion of Constantine, the ultimate fall of the Western empire, &c.

In Modern History, that which is of the greatest importance to the pupil is the history of his own country. The routine of most schools includes the regular and almost

daily reading of English History. In this however and indeed in all departments of history, the teacher must dwell, not so much upon names, dates, genealogies, and the fables of a remote age, as upon those deeds and events which, under Divine Providence, have led to the present condition of the world—the discoveries of science, and those other points which form as it were the great landmarks in the progress of the human race.

The following is a specimen of historical notes for teaching:—

#### LESSON ON THE REIGN OF QUEEN ANNE.

Parentage.	Second daughter of James II. by his first wife, Anne Hyde. (State why she succeeded to the throne in spite of male issue of James II.)
Lineage.	Last of the Stuart family of sovereigns, succeeded William and Mary, 1702, in her 38th year.
Greatest political event of the reign.	Union of the Governments of England and Scotland, under the title of Great Britain, A.D. 1707.
Other important events.	War declared in reference to the Spanish succession. (Mention the nature of the dispute, and the reasons for England's interference.)
Military Commanders.	Duke of Marlborough, Prince Eugene, Earl of Peterborough.
Naval Commanders.	Sir George Rooke, Admiral Benbow.
Remarkable battles.	Blenheim, Ramillies, Oudenarde, Malplaquet, gained by Marlborough. Gibraltar taken by Sir George Rooke.
Results of the different battles.	(Mention the most important.) War concluded 1712. Decided that Philip should mount the Spanish throne. Notwithstanding Marlborough's successes, not much real advantage resulted to England

beyond the acquisition of fame and military glory. Importance of the capture of Gibraltar.

Queen Anne's efforts in favour of the Established Church. Queen Anne's Bounty. Building of churches.

Intrigues of Whigs and Tories in the latter part of Queen Anne's reign.

Celebrated men. Dr. South (a divine); Sir Isaac Newton (philosopher); Pope, Addison, Defoe (literary).

Queen Anne married Prince George of Denmark, but left no children. She died August 1, 1714, having reigned 12 years.

LESSONS ON NATURAL PHILOSOPHY must be confined to those phenomena which are every day passing before the pupil's view; among which may be mentioned *rain, thunder, lightning, dew, snow, hail, &c.* Instruction may also be given upon the primary and secondary properties of matter, together with some of the leading effects produced by the action of heat and electricity; but the teacher must avoid the use of technical terms; or, if these are absolutely necessary in some instances, they must be carefully explained, and the teacher must satisfy himself that the children thoroughly understand the meaning of them.

DRAWING has not hitherto been practised in elementary schools to any extent; indeed the ability to teach this art has rarely been included among the necessary qualifications for a teacher. Where the subject has been introduced, it has been looked upon rather in the light of an amusement *for the junior classes*, than as a branch of instruction likely

to prove permanently useful to the children. Of late however the attention of the Government has been directed to the establishment of Drawing Classes in connexion with elementary schools, and it may be presumed that drawing, especially that branch of it called *Linear*, will, in the course of time, hold amongst educational subjects that place to which, from its bearing upon the industrial pursuits of the people, it appears entitled. In the mean time, masters who are desirous to obtain information upon the plans and proposals of the Government should apply to the Secretary at Marlborough House, London, where classes have been opened for the special instruction of school-teachers.

---

In reference to VOCAL MUSIC, a Minute of the Committee of Council, published in the volume for 1844, has the following remarks:—

“Every schoolmaster of a rural parish ought to instruct the children in Vocal Music, and to be capable of conducting a singing class among the young men and women. The instruction thus communicated would enable him, with such encouragement as he might receive from the clergyman, to form a respectable vocal choir for the village church. This, in itself, would tend to increase the attendance on Divine worship among the uneducated, and would spread an interest in the services of religion, which might prove the first step to more important benefits.” In addition to these advantages, may be mentioned the usefulness of music when it serves as an amusement for the lower classes in their leisure hours, hours which, in the absence of some rational employment, are too often, it is feared, devoted to pursuits of a debasing and vicious tendency.

Among the methods of musical instruction which are most generally practised in schools, one only need be

named here. The method referred to was projected by the Committee of Council on Education about ten years ago, and is now associated with the name of Mr. Hullah, because to that gentleman was confided the task of adapting the method of M. Wilhem (which had previously been used in France) to the state of instruction in our elementary schools. In this method, the lessons are arranged in such a form that a pupil-teacher of ordinary skill may, with the aid of previous instruction, conduct a class through the whole course.

To those who are acquainted with Mr. Hullah's method of teaching Vocal Music, it is unnecessary to offer any remarks here. Those who may be desirous to employ it, and have not had the opportunity of passing through the course, either at a training-institution or elsewhere, are referred to the "Manual," which is published by J. W. Parker, West Strand, London. Mr. Hullah's school works include also selections of school songs, set to appropriate and original music, which embody most successfully such sentiments of a moral and national character as are likely to promote the growth of correct principles in the minds of young children.

---

## CHAPTER XI.

### ON EVENING SCHOOLS.

BEFORE closing our remarks upon the various subjects connected with National Schools, it appears essential that a few observations should be made in reference to Evening Schools for youths and adults. The necessity for such schools is now becoming very generally felt, from the circumstance that the majority of children leave the day

school at so early an age that, unless some means are afforded them for carrying on their studies, the instruction which they have received will be attended with little permanent benefit. And apart from this it may be added, that an evening school affords an innocent occupation for leisure hours, and is therefore, if only in this respect, a matter of great importance.

The greatest difficulty which has been experienced with regard to evening schools is the provision of competent teachers. Masters who have been in charge of day schools for five or six hours, and have, moreover, to give additional instruction to their pupil-teachers, cannot be expected to devote themselves to the work of teaching during two hours in the evening. It is therefore obvious that, unless independent teachers can be provided and remunerated according to a suitable scale, these schools must depend, so far as the machinery of teaching is concerned, upon the personal efforts of the clergymen and other friends to the cause of education who may be disposed to volunteer their services. It may sometimes happen that a tolerably efficient teacher can be found willing to devote a few evenings in the week to the superintendence of an evening school, and the writer remembers having met with an instance in a country village where an intelligent excise officer was employed, after his ordinary daily avocations, as teacher of the evening school, the clergyman having engaged him for the office at a moderate stipend. But it is not often that such a person can be readily found, and therefore it is most desirable that some other more certain means of supplying suitable teachers for evening schools should be provided. About two years ago the attention of the London Diocesan Board of Education was directed to the subject, and it was agreed that pecuniary aid should be furnished from their funds towards the establishment of evening schools in the metropolitan districts. The grants made for this

purpose included assistance towards making up the salary of a teacher who should be engaged during the morning or afternoon in the elementary day school, and afterwards in the evening school. From the London Board the matter passed under the consideration of the Committee of Council, whose views are embodied in a letter from the Secretary, entitled 'Evening Schools for the Labouring Classes,' and published in the volume of *Minutes* for the year 1851-52. In this letter it is stated that the Committee will assist in the formation of evening schools for young persons, where such schools are attached to existing day schools, by allowing the usual augmentation grant to a certificated teacher, on the understanding that he shall be employed during no more than the morning or afternoon in the day school, in addition to the charge of the evening school.

It was proposed by the London Board of Education that the evening schools assisted by them should be confined to young persons between the ages of twelve and seventeen. The limits within which pupils are to be admitted must depend mainly on local circumstances. In some places it may be advisable to exclude *adults*, but in most cases it appears reasonable that the schools should be open to all those above a certain age whose occupations preclude them from obtaining instruction during the day-time.

The subjects of instruction should resemble as much as possible those to which the pupils have been accustomed at their day school. Reading, writing, and arithmetic, are those which most readily suggest themselves. The reading lessons may include history, geography, grammar, &c. Occasionally familiar conversational lectures may be given upon those sciences which bear upon every-day life, such, for example, as the properties of steam and the structure of the steam-engine, or of electricity in connexion with the electric telegraph. Mechanics and mensuration are

also very suitable subjects of study for those pupils who have received in an elementary school instruction sufficient to enable them to understand such subjects. Religious instruction must be left in the hands of the parochial clergyman: it should be undertaken for at least *one hour* during the week. But the Bible ought not to be used as the class reading-book, for reasons which have been already stated in a previous part of this work.

Evening schools are generally opened about the beginning of October and closed at Easter. During the summer months it is found that the majority of pupils manifest a preference for out-door employments and amusements; and it is better to close the school altogether than to keep it open only for the few who would be inclined to attend. Three or four evenings at most are quite sufficient for evening instruction,—an hour and a half being devoted each evening to actual study. In most instances seven o'clock appears to be the most suitable hour for opening, when a quarter of an hour will be consumed in prayers and preparation for the lessons. The time from  $\frac{1}{4}$  past 7 to  $\frac{1}{4}$  past 8 may be divided into three periods of half an hour each; afterwards an additional  $\frac{1}{4}$  of an hour will be expended in prayer and singing, and the business of the evening may then be concluded by 9 o'clock.

The subjoined Time Table is constructed according to the division of time which is generally adopted in town schools :—



*Time Table.*

MONDAY AND TUESDAY.					
Class.	7 to 7½	7½ to 7¾	7¾ to 8½	8½ to 8¾	8¾ to 9
1	Prayers, &c.	Reading, &c.	Arithmetic.	Writing from Dictation.	Prayers and dismiss.
2		Writing.	Reading, &c.	Arithmetic.	
3		Arithmetic.	Writing.	Reading, &c.	

THURSDAY.					
Class.	7 to 7½	7½ to 7¾	7¾ to 8½	8½ to 8¾	8¾ to 9
1	Prayers, &c.	Mensuration or Mechanics.	Geography.	Arithmetic.	Prayers, &c.
2		Dictation.	Reading, &c.	Arithmetic.	
3		Writing.	Arithmetic.	Reading, Spelling, &c.	

FRIDAY.					
Class.	7 to 7½	7½ to 7¾	7¾ to 8½	8½ to 8¾	8¾ to 9
1	Prayers, &c.	Religious Instruction by the Clergyman.	Reading, &c.	Arithmetic.	Prayers, &c.
2			Writing.	Reading, &c.	
3			Dictation.	Reading, &c.	

The charge for admission to evening schools must, of course, vary according to circumstances. It is sometimes as low as a halfpenny per night, and occasionally as high as sixpence a week. In very rare instances these schools are opened gratuitously, but where the scholars can afford

to pay, if only a mere trifle, they should be required to do so.

With regard to the methods of instruction most suitable for evening schools, little need be said here. The teacher must himself judge how far the plans recommended for children in day schools may be applied to pupils of a more advanced age. Some modification of those plans will no doubt be found generally necessary, and less of the severe discipline of ordinary school-work will be required. As much scope as possible should be afforded for individual exertion, and, with a view to this, every scholar should be allowed to work in arithmetic, or in any other suitable subject, by himself, and from his own book of examples, permission being given him to refer to the master when in need of any explanations.

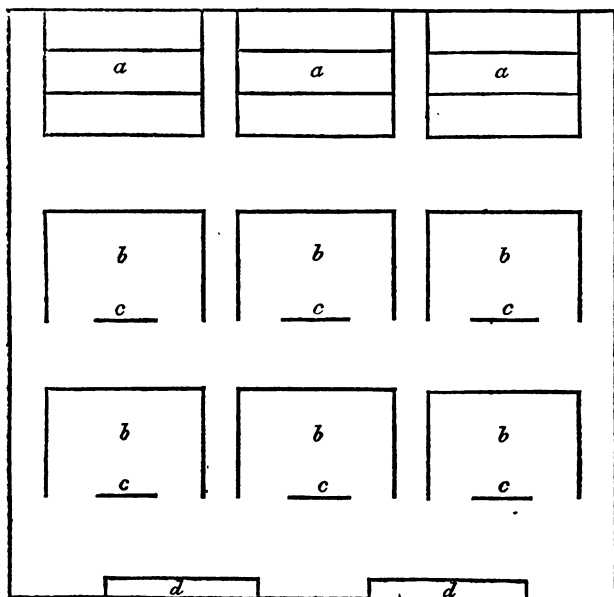
The success of an evening school (and the remark we are about to make will apply perhaps with equal force to other schools also) will depend more upon the hearty good will and earnest endeavours of those who are concerned in its operations than upon the methods which may happen to be pursued. Method is, after all, only the *means* by which we hope to arrive at certain *results*. The true end of all education should be the inculcation of such principles as will conduce to the religious and moral well-being of the young; such as will lead them to perform their duties towards God and their neighbour zealously and heartily, "as unto the Lord, and not unto men." Let the teacher therefore duly estimate the importance of his sacred office—let him keep constantly in view the objects for which he has to labour; and he can scarcely fail to be inspired with true ideas and just notions of the *art* of teaching.



## APPENDIX.

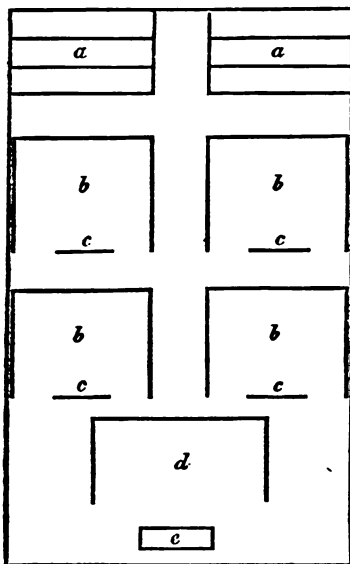
(A.)

### 1. *Plan for a Square Schoolroom.*



The classes in parallel desks (*a*), and in the squares (*b*), all face in one direction. Six classes are generally at work in the room, and, when the desks are occupied by three classes, the other classes are placed in the squares farthest removed from them. Class-boxes stand in front of the classes, as at (*c*). Desks for occasional use are marked (*d*). The class-rooms are fitted with forms round three sides, and desks which may be raised from the wall when required.

## 2. Plan for an Oblong Schoolroom.



(a.) Parallel desks.

(b.) Class squares.

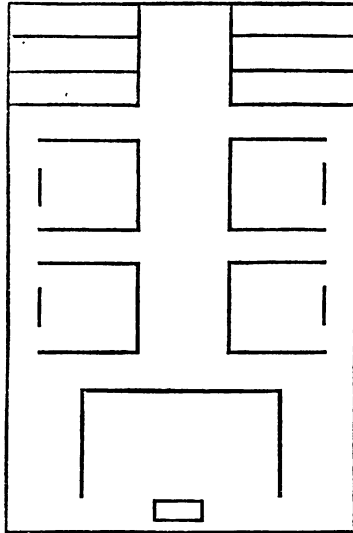
(c.) Class boxes.

(d.) 1st class square.

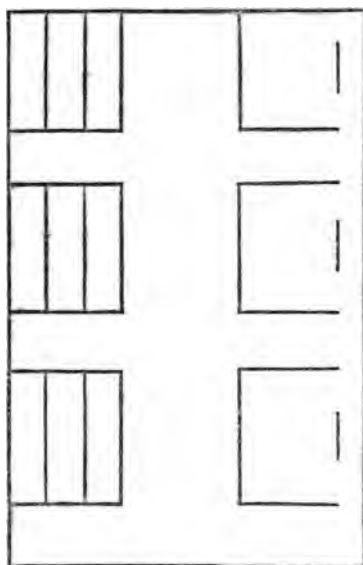
(e.) Master's desk.

If no class-room is attached to the school, the master might find it very convenient to place the highest class close to his own desk as above; and if the desk were a little raised he would be the better able to overlook the more distant parts of the room.

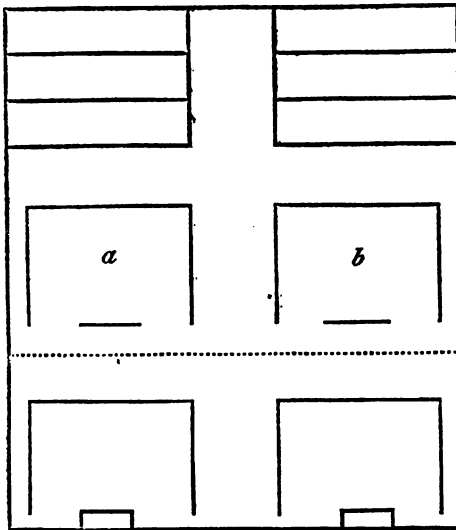
3. *Plan for an Oblong Schoolroom.*



This plan resembles the last, except that the class squares face towards the walls instead of in one direction. This arrangement will give the master the advantage of being able to see the faces of his monitors in whatever part of the room he may be engaged. It will also admit of maps, diagrams, &c., being exhibited on the walls before the classes, without requiring the assistance of easels.

*4. Plan for an Oblong Schoolroom.*

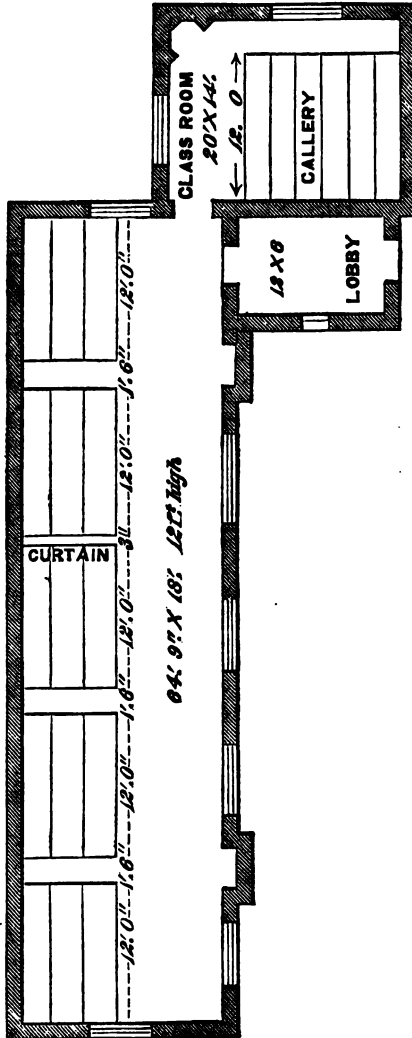
This plan is intended to exhibit the principle upon which the groups of desks and squares are arranged in the plans for fitting schoolrooms, as laid down in the Minutes of the Committee of Council for 1844, vol. i. About one-half the room is occupied by desks, which run lengthwise through, with passages between each group; the other half is filled with class-squares.

5. *Plan for a Mixed School.*

Here the boys may receive their instruction during the forenoon in the desks, and in the squares marked (*a*) and (*b*), the girls occupying the other squares for their needlework. If it is thought necessary to divide the room a curtain may be used. The dotted line indicates the direction in which the rod might be made to traverse the room.



Within the last two years a paper has been published by the Committee of Council, entitled a 'Memorandum respecting the organization of Schools in parallel groups of benches and desks. Plans are appended, from which it may be observed that no provision is made for teaching in class-squares. A group of parallel desks is allotted to each class. For this arrangement an oblong room is recommended, with just width enough for one group of desks placed lengthwise, and sufficient space in front for the teacher. The width required is estimated at 17 or 18 feet. The groups of desks are separated by curtains, except when the teacher addresses himself to two classes at once, which it will sometimes be necessary for him to do in the absence of a gallery for simultaneous instruction. When a class-room is added to the room, a gallery is recommended to be placed in it. The length of desk allowed for each child is 18 inches.

6. *Plan recommended by the Committee of Council.*

## B.—SCHEDULE OF INSTRUCTION FOR PUPIL TEACHERS.

I.—*Time-Table of Lessons to be given by the Master.*  
*Each Lesson  $\frac{1}{2}$  of an hour.*

	First $\frac{1}{2}$ Hour.	Second $\frac{1}{2}$ Hour.
Monday .	Scripture.	Mathematics.*
Tuesday .	Geography.	Mathematics.
Wednesday	Mathematics.	Catechism.
Thursday .	Reading. History.	Grammar and Ety- mology.
Friday . .	Liturgv.	Mathematics.

\* Under the term *Mathematics* are included Arithmetic, Book-keeping, Algebra, Mechanics, Mensuration, Land-surveying, Levelling, and Euclid. The pupil-teacher's year of apprenticeship, and the subjects which may have been selected for his future examination, must decide as to which branch of study should predominate. The "Broad Sheet for Pupil Teachers," put forth by the Committee of Council on Education, defines accurately the extent to which each of the above subjects is expected to be carried in each successive year of the apprenticeship.

II.—*Pupil-Teacher's Time-Table of Home Work, bearing upon the Lessons given by the Master.*

*Monday Evening.*

*Preparation for Tuesday.*—Sketch a Map, and learn by heart facts in Physical and Political Geography. Work examples in one of the Mathematical subjects above mentioned.

*Tuesday Evening.*

*Preparation for Wednesday.*—Learn by heart a lesson in the Church Catechism, with Scripture Texts (Archdeacon Sinclair's Questions). Work examples in one or more of the Mathematical subjects.

*Wednesday Evening.*

*Preparation for Thursday.*—Write a short Essay upon some subject previously given, or write an Account of some reign in English History, or paraphrase a piece of Poetry.

Learn a lesson in Grammar or Etymology, and learn to Parse from the next day's reading lesson.

*Thursday Evening.*

*Preparation for Friday.*—Prepare for repetition a lesson on the Liturgy. Work examples in one or more of the Mathematical subjects.

*Friday Evening, and Saturday.*

*Preparation for Monday.*—Prepare a lesson on Scripture History, and sketch a Map to illustrate the places mentioned in it. Work examples in two or more of the Mathematical subjects.

N.B.—All home work to be done in Manuscript books—a separate book for each subject.

## (C.)—TIME-TABLES FOR THE USE OF SCHOOLS.

[Time-Tables may be made to answer for the Winter Months by shortening the Afternoon.]

*For a School of 120 Boys.—Six Classes.*

A.M.	1st CLASS.	2nd CLASS.	3rd CLASS.	4th CLASS.	5th CLASS.	6th CLASS.
9 to 9.15	Prayers and Singing.					
9.15 to 9.45	Scripture Reading with Explanation.		Writing or Linear Drawing.	Writing or Linear Drawing.	Repetition of Catechism.	
9.45 to 10.15	Writing in Books.		Reading in Religious Books.		Arithmetic.	Figures.
10.15 to 10.30	Repetition of Lessons previously prepared.					
10.30 to 10.45	Interval of Relaxation in the Playground.					
10.45 to 11.15	Church Catechism.	Catechism.	Arithmetic.	Arithmetic.	Reading and Spelling.	Reading and Spelling.
11.15 to 11.45	Arithmetic.	Arithmetic.	Catechism.	Catechism.	Writing.	Writing.
11.45 to 12	Books, Slates, &c., collected. Dismiss.					
P.M.	Secular Reading, with Parsing, &c. Repetition of Grammar or Etymology.	Dictation or Writing from Memory.	Dictation or Writing from Memory.	Reading and Spelling.	Reading and Spelling.	Reading and Spelling.
2 to 2.45						
2.45 to 3.15	Dictation. Occasionally Drawing.	Secular Reading. Definition of Parts of Speech.	Secular Reading.	Writing.		Writing.
3.15 to 3.30	Interval of Relaxation.					
3.30 to 4.15	Arithmetic.		Learning Geographical Terms.	Dictation.		Learning Geographical Terms.
4.15 to 4.40	Geography, Descriptive or Mathematical.		Arithmetic.		Learning and Repeating Hymns, &c.	Learning and Repeating Hymns, &c.
4.40 to 4.50	Tables and Mental Arithmetic.					
4.50 to 5	Books, &c., collected. Prayers and Singing—the whole School.					

\* Fill up Attendance and Absence Registers.

*For a School of 80 Boys.—Four Classes.*

A.M.	1st CLASS.	2nd CLASS.	3rd CLASS.	4th CLASS.
9-15	Prayers and Singing.			
9-45	M. W. F. Scripture Reading, with Explanation. Tu. Th. Church Catechism, with Analysis.		Writing or Drawing (silent).	
10-10	Repetition of Lessons previously prepared.		M. W. F. Texts illustrated. Church Catechism. Tu. Th. Poetry.	
10-30	Mon. Liturgy.—Wed. Repetition of Church Catechism. Plain Text.—Fri. Scripture History.—Tu. Th. Scripture History.		Arithmetic on Small Slates (silent).	
* 10-45	Interim for Relaxation.			
11-15	Arithmetic.	Writing in Books.	Reading Religious Books.	Reading and Spelling.
11-45	Writing in Books.	Arithmetic.	Catechism.	Catechism.
12	Books and Slates collected. Sing Grace. Dinners, &c.			
P.M. 2-45	Reading in Secular Book, with Parsing and Examination.	Dictation or Writing from memory.	Arithmetic.	Reading.
3	Repetition of Lessons previously prepared.		M. W. F. English Grammar. Tu. Th. Etymology.	
3-30	Arithmetic.	Reading in Secular Book, with Parsing and Examination.	Reading.	Writing or Figures.
* 3-40	Interim for Relaxation.			
4-10	Dictation, or reproducing Lessons on Slates.	Arithmetic.	Dictation and Spelling.	Spelling, &c.
4-30	Geography : Scriptural, Physical, and Political, alternately.	Learning Geographical Terms, &c.	Learning Prayers, Collects, Graces, &c.	
4-45	Tables and Mental Arithmetic.			
5	Books, &c., collected. Prayers and Singing—the whole School.			

• Fill up Attendance and Absence Registers.

*For a School of 120 Girls.—Six Classes.*

A.M.	1st CLASS.	2nd CLASS.	3rd CLASS.	4th CLASS.	5th CLASS.
9 to 9-15	Prayers and Singing. Inspect for Cleanliness.				
9-15 to 9-45	M. W. F. Scripture Reading. Tu. Th. Secular Reading, Parsing, &c.		Writing in Books.		Learning Hy &
9-45 to 10-15	M. W. F. Writing. Tu. Th. Catechism.	M. W. F. Writing. Tu. Th. Dictation, or Writing from Memory.	M. W. F. Religious Reading. Tu. Th. Arithmetic.		M. W. F. Arithmetic. Tu. Th. Writing.
* 10-15 to 10-30	Repetition of Lessons previously prepared.				
10-30 to 10-45	Interval of Relaxation.				
10-45 to 11-15	M. W. F. Arithmetic. Tu. Th. Dictation, or Writing from Memory.	M. W. F. Arithmetic. Tu. Th. Catechism.	M. W. F. Catechism. Tu. Th. Dictation, or Writing from Memory.	M. W. F. Dictation. Tu. Th. Catechism.	Reading as
11-15 to 11-45	M. W. F. Geography. Tu. Th. Mental Arithmetic.	M. W. F. Geographical Terms. Tu. Th. Mental Arithmetic.	M. W. F. Mental Arithmetic. Tu. Th. Secular Reading.		M. W. F. Writing or Dictation. Tu. Th. Arithmetic.
11-45 to 11-55	Tables—the whole School.				
11-55 to 12	Books, &c., collected. Chant Grace. Dismiss.				
P.M.					
2	Needlework and Knitting.				

\* Fill up Attendance and Absence Registers.

\* Fill up Attendance and Absence Registers.

*For a School of 80 Girls.—Four Classes.*

	1st CLASS.	2nd CLASS.	3rd CLASS.	4th CLASS.
L - 15	Prayers and Singing. Inspect for Cleanliness.			
9-45	M. W. F. Scripture Reading. Tu. Th. Catechism.		Writing (3rd Class in Books).	
10-15	M. W. F. Arithmetic. Tu. Th. Secular Reading, Grammar, &c.	M. W. F. Secular Reading. Tu. Th. Dictation or Writing from Memory.	M. W. F. Reading in Religious Books. Tu. Th. Arithmetic.	Reading and Spelling.
10-30	Repetition of Lessons previously prepared.			
* 10-45	Interval of Relaxation.			
11-15	M. W. F. Catechism. Tu. Th. Dictation or Writing from Memory.	M. W. F. Catechism. Tu. Th. Arithmetic.	M. W. F. Arithmetic. Tu. Th. Catechism.	Catechism.
11-45	M. W. F. Geography. Tu. Th. Mental Arithmetic, Tables, &c.	M. W. F. Mental Arithmetic. Tu. Th. Geographical Terms, &c.	M. W. F. Dictation. Tu. Th. Reading, Spelling, &c.	Arithmetic.
11-55	Tables—the whole School.			
to 12	Books, &c., collected. Chant Grace. Dismiss.			
M. - 2	Needlework and Knitting.			
* Fill up Attendance and Absence Registers.				



*For a Mixed School of 110 Children.—Five Classes.*

A.M.	1st CLASS.	2nd CLASS.	3rd CLASS.	4th CLASS.
Boys & Girls. 9 to 9-15	Doors shut. Prayers and Singing—the whole School.			
9-15 to 10	M. W. F. Reading and Exposition of the Gospels. Tu. Th. Church Catechism, 1st Analysis.		Writing on Slates or Drav	
10 to 10-30	M. W. F. Writing. Tu. Th. Dictation or Writing from Memory.		M.W. F. Reading in Religious Books. Tu. Th. Reading in Secular Books.	Reading and
* 10-30 to 10-45	Exercise or Relaxation.			
10-45 to 11-15	M. W. F. Arithmetic. Tu. Th. Reading in Secular Books, with Grammar, &c.		Repetition of Catechism	
11-15 to 11-45	M. W. F. Church Catechism, Liturgy, and Scripture History. Tu. Th. Geography.	M.W. F. Church Catechism or Scripture History. Tu. Th. Preparing Lessons.	Arithmetic.	
11-45 to 12	Repetition of Lessons previously prepared. Dismiss.			
P.M.				
2 to 4-45	Girls, Needlework.			
Boys. 2 to 2-30	M.W. F. Reading Secular Book, with Grammar, &c. Tu. Th. Reading & explaining Acts of the Apostles.	Dictation.	Learning Collects, Prayers, and Graces.	Reading and
2-30 to 3	Dictation on small Slates, or Drawing.	M.W. F. Secular Reading. Tu. Th. Religious Reading.	Reading and Spelling.	Learning ( Prayers, an
* 3 to 3-15	Exercise or Relaxation.			
3-15 to 3-45	Arithmetic (large Slate).	Arithmetic.	Easy Dictation or Writing.	Writing or Drawing.
3-45 to 4-15	Geography: Mathematical, Descriptive, & Scriptural, alternately.	Geography and Drawing, alternately.	Arithmetic.	Object I
4-15 to 4-45	Tables and Mental Arithmetic.			
Boys & Girls. 5	Books collected. Prayers and Singing—the whole School. Dismiss			

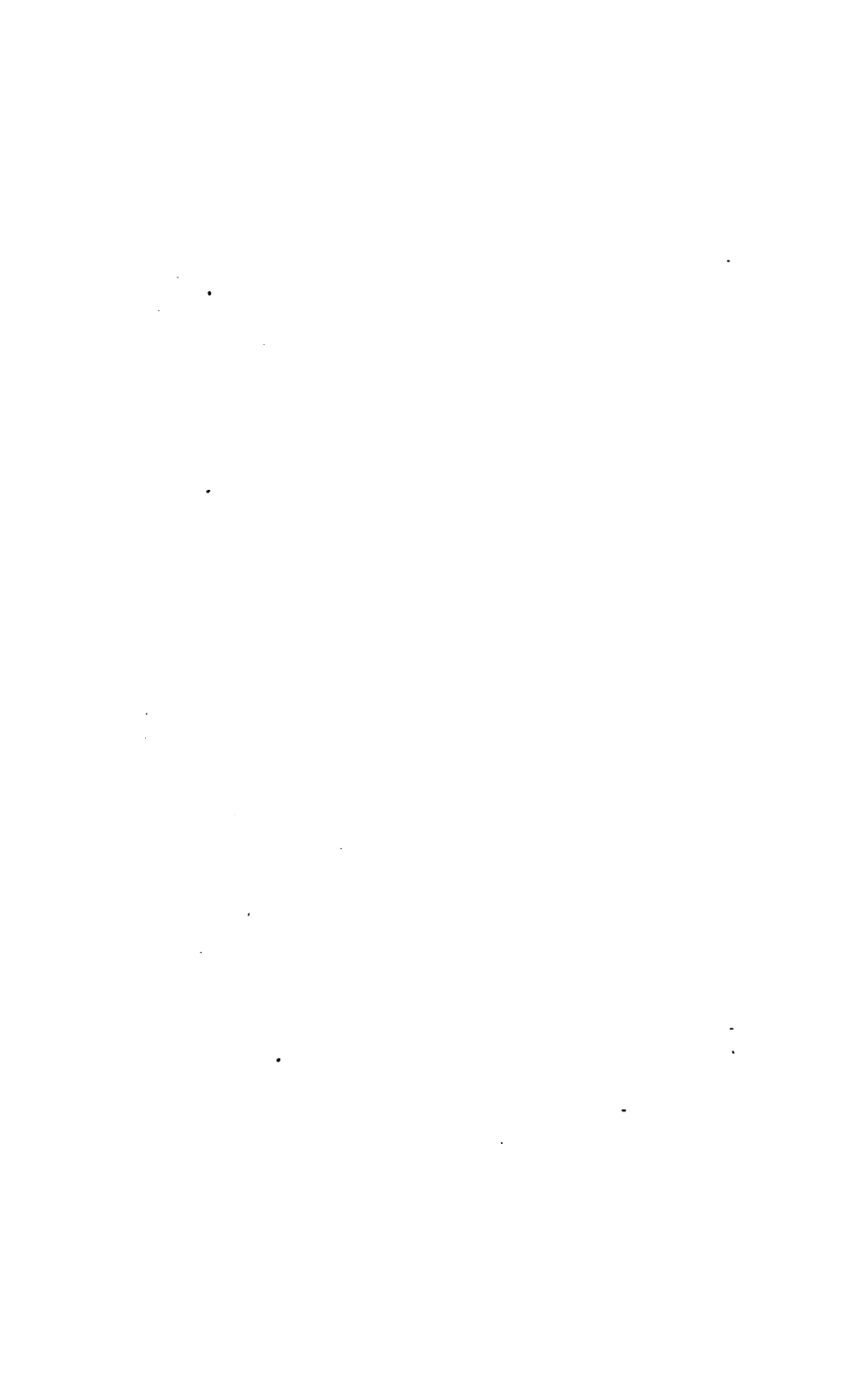
\* Fill up Attendance and Absence Registers.

*For a Mixed School of 70 Children.—Three Classes.*

A.M.	1st CLASS.	2nd CLASS.	3rd CLASS.
Boys & Girls. 9 to 9:15	Prayers and Singing. Inspect for Cleanliness.		
9:15 to 9:50	M. W. F. Scripture Reading. Tu. Th. Secular Reading. (1st Class, Parsing, &c.)		Writing or Linear Drawing.
9:50 to 10:30	M. W. F. Arithmetic. Tu. Th. Catechising.	M. W. F. Arithmetic. Tu. Th. Dictation.	Reading and Spelling
10:30 to 11	Interval of Relaxation.		
11 to 11:30	M. W. F. Writing in Books. Tu. Th. Scripture and General Geography.	M. W. F. Writing. Tu. Th. Catechising.	M. W. F. Slate Arithmetic. Tu. Th. Mental Arithmetic.
11:30 to 11:55	Hearing Lessons prepared at Home. M. W. Dictation. Tu. Th. Tables and Mental Arithmetic. Fri. Catechising.	Hearing Lessons prepared at Home. M. W. F. Geography. Tu. Th. Mental Arithmetic.	Repeating Hymns, Graces, &c. Catechising.
11:55 to 12	Books collected. Chant Grace. Dismiss.		
P.M.			
Girls. 2	Needlework and Knitting.		
Boys. 2 to 2:30	M. W. F. Reading in Secular Book, Parsing, &c. Tu. Th. Reading Acts of the Apostles.	Dictation or Linear Drawing.	Learning Collects, Prayers, and Graces
2:30 to 3	Dictation or Linear Drawing.	M. W. F. Reading in Secular Book. Tu. Th. Religious Reading.	Reading and Spelling
3 to 3:15	Interval of Relaxation.		
3:15 to 3:45	Arithmetic.		Writing or Figures
3:45 to 4:15	Geography: Mathematical, Descriptive, and Scriptural, alternately.	Geography. Oral Lesson.	Object Lesson.
4:15 to	Tables and Mental Arithmetic.		
	Prayers and Singing. Dismiss.		

\* Fill up Attendance and Absence Registers.

**LONDON:**  
**PRINTED BY WILLIAM CLOWES AND SONS, STAMFORD STREET,**  
**AND CHARING CROSS.**













THE HISTORY OF THE  
CITY OF BOSTON  
FROM 1630 TO 1800

By  
JOHN H. COOPER